

**DESIGNING A PROFESSIONAL DEVELOPMENT PLAN FOR
THE SUPPORT OPERATIONS OFFICER OF
THE FORWARD SUPPORT COMPANY**

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

**MASTER OF MILITARY ART AND SCIENCE
General Studies**

by

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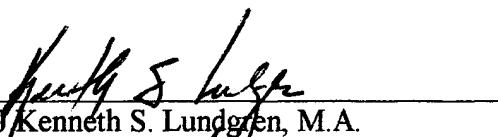
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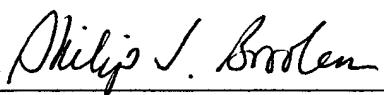
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ABSTRACT

DESIGNING A PROFESSIONAL DEVELOPMENT PLAN FOR THE SUPPORT OPERATIONS OFFICER OF THE FORWARD SUPPORT COMPANY, by MAJ Edward W. Zimmerman, USA, 110 pages.

As the U.S Army moves into the twenty-first century, technology will be used more than ever to enhance combat operations. Force XXI redesign uses technological enablers to enhance proficiency and situation awareness on the battlefield. These enhancements are needed to overcome reductions in equipment and personnel. Combat Service Support (CSS) on the battlefield must change in order to support faster moving operations and overcome limited resources. In Force XXI, technology is used to provide precision logistics in order to maximize the use of limited resources. To accomplish the logistical goals of the Force XXI division, the Forward Support Company (FSC) replaces the support platoon of the maneuver battalion in the Army of Excellence (AOE). The FSC support operations officer's ability to operate in a multifunctional logistics environment will be essential for the maneuver battalion to succeed on the battlefield.

This thesis analyzed the responsibilities of the support operations officer in the FSC of the Force XXI division redesign. Based on these responsibilities, the research question (Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC?) served as the basis of this study. This research examined what skills, knowledge, and behaviors (SKBs) are most important for a CSS lieutenant to succeed as the FSC support operations officer. Once the SKBs were identified and prioritized, a professional development plan was designed to assist institutional and operational CSS leaders in training the CSS lieutenants in these SKBs.

This research examined literature on Force XXI logistics and the FSC's responsibilities. The support challenges for the FSC and specifically the support operations officer guided the development of desired SKBs. A survey of subject matter experts prioritized the importance of the SKBs and assisted in formulating the professional development plan that addressed the three pillars of the Army leader development model (institutional, operational, and self-development).

This study concluded that a comprehensive professional development plan was required to develop a CSS lieutenant in the desired SKBs in order for the lieutenant to be successful as the FSC support operations officer. Appendix B represents the proposed professional development plan using Kotter's eight-stage process of change as the format.

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TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ABSTRACT	iii
ACKNOWLEDGMENTS	iv
LIST OF ILLUSTRATIONS.....	viii
LIST OF TABLES.....	ix
LIST OF ABBREVIATIONS	x
CHAPTER	
 1. INTRODUCTION	1
 Research Question	2
 Background of Force XXI Logistics	4
 Desired SKBs of the FSC Support Operations Officer	16
 The FSC Support Operations Officer Professional Development Plan	18
 Summary of the Thesis	23
 Scope	23
 Limits	24
 Assumptions	24
 Key Terms	25
 2. REVIEW OF LITERATURE	27
 Introduction	27
 Concept of Literature Review	28
 Force XXI Logistics and the FSC	30

Support Operations Officer's Responsibilities and SKBs	33
The FSC Support Operations Officer Professional Development Plan	36
Development of the Research Method	40
Conclusion	42
3. RESEARCH DESIGN.....	44
Introduction	44
Research Method	44
Subquestion One	48
Subquestion Two	48
Subquestion Three	49
Survey Analysis	49
4. ANALYSIS	50
Introduction	50
Demographics	51
Survey Analysis	53
Summary of Survey Analysis	75
5. DISCUSSION, CONCLUSION AND RECOMMENDATIONS.....	78
Discussion	78
Conclusions	79
Recommendations	81
Recommendations for Further Research	82
APPENDIX	
A. SURVEY	83

B. FSC SUPPORT OPERATIONS OFFICER PROFESSIONAL DEVELOPMENT PLAN	87
Introduction	87
Background of the Professional Development Plan	88
The Design of the Professional Development Plan	89
Conclusions	104
REFERENCE	106
INITIAL DISTRIBUTION LIST	110

LIST OF ILLUSTRATIONS

Figure		Page
1. FSC Organization Chart		6
2. Management Migration		8
3. Concept of Literature Review		30
4. Designing the FSC Support Operations Officer Professional Development Plan.....		90

LIST OF TABLES

Table	Page
1. Demographics of SMEs by Rank	51
2. Demographics of SMEs by Position	51
3. Demographics of SMEs by Track	51
4. Cross-tabulation Between Rank and Position	52
5. Cross-tabulation Between Rank and Track	52
6. Cross-tabulation Between Position and Track	52
7. SMEs Responses to the Research Question	55
8. Summary of Mean Rank Prioritization of SKBs	57
9. Summary of Mean Rank Prioritization of Tactical Logistics Functions	63
10. Summary of Primary Development Pillar	68
11. Summary of Mean Rank Prioritization of Institutional Approaches	70
12. Summary of Mean Rank Prioritization of Operational Approaches	72
13. Summary of Mean Rank Prioritization of Self-development Approaches	74

LIST OF ABBREVIATIONS

AOE	Army of Excellence
ALMC	Army Logistics Management College
ASP	Ammunition Supply Point
ATP	Ammunition Transfer Point
BDE	Brigade
BN	Battalion
BSA	Brigade Support Area
BSC	Base Support Company
CAS³	Combined Arms Services Staff School
CASCOM	Combat Arms Support Command
CCL	Combat Configuration Loads
CDR	Commander
CLOAC	Combined Logistics Officer Advance Course
CP	Command Post
CROP	Containerized Roll On/Off Platform
CTCP	Combat Trains Command Post
CSB	Corps Support Battalion
CSS	Combat Service Support
CSSCS	Combat Service Support Control System
DASB	Division Aviation Support Battalion
DS	Direct Support

DSB	Division Support Battalion
EAD	Echelons Above Division
FA 90	Functional Area 90 (Multifunctional Logistics)
FAS	Forward Aid Station
FLD	Field
FMTV	Family Medium Tactical Vehicle
FRS-H	Forward Repair System--Heavy
FRT	Forward Recovery Team
FSB	Forward Support Battalion
FSC	Forward Support Company
FBCB2	Force XXI Battle Command Brigade and Below
GCSS-A	Global Combat Service Support--Army
HHC	Headquarters and Headquarters Company
ICS3	Integrated Combat Service Support System
ITV	In-Transit Visibility
LOGPAC	Logistics Package
MAINT	Maintenance
MSB	Main Support Battalion
MST	Maintenance Support Team
MTS	Movement Tracking System
OBC	Officer Basic Course

ORB	Officer Record Brief
OPS/OPNS	Operations
POI	Program of Instruction
SAAS	Standard Army Ammunition System
SAMS	Standard Army Maintenance System
SARSS	Standard Army Retail Supply System
SIDPERS	Standard Installation/Division Personnel System
SCL	Strategic Combat Load
SKBs	Skills, Knowledge, and Behaviors
SME	Subject Matter Expert
SOP	Standing Operating Procedures
SPT	Support
SPO	Support Operations Officer
STAMIS	Standard Army Management Information System
SVC	Service
TAV	Total Asset visibility
TF	Task Force
TFSA	Task Force Support Area
TNS	Transportation
TSP	Training Support Plan
ULLS-G	Unit Level Logistics System--Ground
ULLS-S4	Unit Level Logistics System--S4
UMCP	Unit Maintenance Collection Point

CHAPTER 1

INTRODUCTION

Army combat service support functional organizations, capabilities, and doctrine under Force XXI rubric are facing dynamic change. Clearly more so today and in the future, CSS will be called upon to do more with less. How this force will fight and sustain is what Force XXI is all about. The battlefield dynamics of Force XXI dictate that the CSS function be reengineered to sustain the maneuvers capability for lethality, optempo, sustainability, and survivability. (Link 1996, 1)

Success on the Force XXI logistics battlefield lies with senior combat service support (CSS) leaders able to develop junior officers to perform logistics functions previously performed at the field grade level. Force XXI logistics redesign envisions a lieutenant serving as the forward support company (FSC) support operations officer with the skills, knowledge, and behaviors (SKBs) traditionally associated with a major or senior captain serving in a forward support battalion (FSB) as a support operations officer. As identified in DA PAM 350-58, *Leader Development for America's Army*, leaders develop and enhance their SKBs using the Army leader development system that consist of three pillars: institutional training and education, operational assignments, and self-development. This study examined the primary responsibilities of the FSC support operations officer in the Force XXI division and the Army's leader development system with the intent of eventually producing a professional development plan.

This plan (see appendix B, FSC Support Operations Officer Professional Development Plan) identifies the framework that can be refined by institutional and operational CSS leaders to train the FSC support operations officer. This professional development plan can be tailored to the individual lieutenant's and the organization's

needs by the operational leader as required. The institution performs as the lead agency for developing and updating the plan. The operational leader implements the plan in a manner that produces a lieutenant who possess the desired SKBs and the following characteristics identified in DA PAM 350-58, *Leader Development for America's Army*:

1. Anticipate, manage, and exploit change;
2. Accurately assess situations, solve problems, and act decisively under pressure; and
3. Clearly provide purpose, direction, motivation, and vision to their subordinates while executing operations following their superior's intent (DA PAM 350-58 1994, 2).

This thesis was designed for logistics leaders who have a basic understanding of Force XXI and the logistical changes that it requires. The study was based on the Force XXI concept as of August 1998. A concept in constant transition, where there exists a risk that ideas addressed in this study, may require modification. Nevertheless, based on the method of design, the professional development plan will remain useful to key CSS leaders as it pertains to developing CSS lieutenants to serve as support operations officers in the FSC.

The Research Question

Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC of the Force XXI division? In an attempt to answer this primary question, information pertaining to the FSC support operations officer's responsibilities was used to develop SKBs for that position. The Army leader development system was a baseline used to develop a specific professional development plan to train CSS lieutenants in the SKBs identified. The

analysis of secondary data provided the background information to guide the research using three subordinate problems.

Subordinate Questions

To answer the research question, and ultimately design a professional development plan to train CSS lieutenants to serve as support operations officers in the FSC required answering the following subordinate questions:

1. Which SKBs are most important for the FSC support operations officer to successfully perform his duties?
2. Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties?
3. Which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC?

Importance

Primary data obtained from a survey of subject matter experts (SMEs) answered the research and subordinate questions and served as the foundation of this study. These issues were paramount in that they affected the quality of training and the approach to developing a CSS lieutenant's SKBs that allow him to successfully perform his duties as the FSC support operations officer. The FSC support operations officer's performance directly impacts the mission success for the FSC and the supported maneuver battalion. The importance of the FSC support operations officer's performance and of the Army's approach to developing that officer was apparent when looking at the concept of support

for Force XXI, the FSC support operations officer's responsibilities, and the Army leader development system.

Background of Force XXI Logistics

As the U.S Army moves into the twenty-first century, technology will be used more than ever to enhance combat operations. Force XXI redesign employs technological enablers to enhance proficiency and situation awareness, allowing for a faster pace of warfare and a technologically advanced smaller unit to defeat a larger unit on the battlefield (Force XXI Concept for CSS 1998, 1-1). Meeting the challenges of Force XXI requires a conceptual shift in the CSS. This conceptual shift involves the FSC and specifically the support operations officer. In order to fulfill the Force XXI vision, the FSC support operations officer must be developed in SKBs normally associated with multifunctional logistics using the Army leader development system as a guide.

Force XXI Concept of Support

Through Force XXI's enhanced digital logistical awareness and forecasting capabilities, CSS leaders at all levels must provide the foresight and responsiveness necessary to anticipate and maintain the division's operations tempo. The AOE CSS organizational structure does not provide this capability. (Force XXI Concept for CSS 1998, 1-1)

In Force XXI, technology provides precision logistics in order to maximize the use of limited resources. The primary difference between the Army of Excellence (AOE) and Force XXI CSS operations at brigade and battalion level is that the FSC replaces the support platoon in the maneuver battalion. The FSC, by design, is a multifunctional, modular unit that is structured to effectively combine organizational and direct logistical support at the right time as close to the point of need as possible (CASCOM, CSS

Operations in Force XXI 1996, 1-1). The FSC is under the command and control of the FSB commander, whereas the maneuver battalion commander controlled the support platoon in the AOE. This organizational and doctrinal change in the maneuver battalion's CSS allows the maneuver battalion commander to focus on the fight and has logistical leaders focused on logistics at the lowest levels (CASCOM 1998, 24). "The FSC also gains increased efficiency and effectiveness through centralized support. Centralized support allows the FSB commander to cross-level between FSCs and weight the battle logistically as required" (Force XXI Concept for CSS 1998, 2-10).

As of July 1998, the FSC is comprised of a headquarters section, support operations section, supply and transport platoon, and a maintenance platoon (figure 1). The FSC provides all classes of supply (-CL VIII), food service, and tactical field maintenance (DS/Unit) to itself and the battalion it supports (Force XXI Concept for CSS 1998, 2-10). Designed to support a specific maneuver battalion, the FSC provides support and synchronization for five of the six tactical logistics functions (arm, fuel, fix, move, and sustain). The FSC concept of support offsets the reduction in resources and provides more effective control by optimizing flexibility and response using technological changes for centralized management (Pate 1996, 8). The FSC's ability to employ this concept of support is accomplished through automation enablers that provide situation awareness and lead to precision logistics. Precision logistics is anticipatory in nature, and precise requirements are visible to key CSS leaders as opposed to strictly estimated requirements of the past. This concept is truly a dynamic change in the way organizational logistics is performed at the maneuver battalion level. To accomplish the

FSC mission, a support operations officer is assigned the responsibilities of coordinating and synchronizing logistics support to the combat arms battalion (CAB).

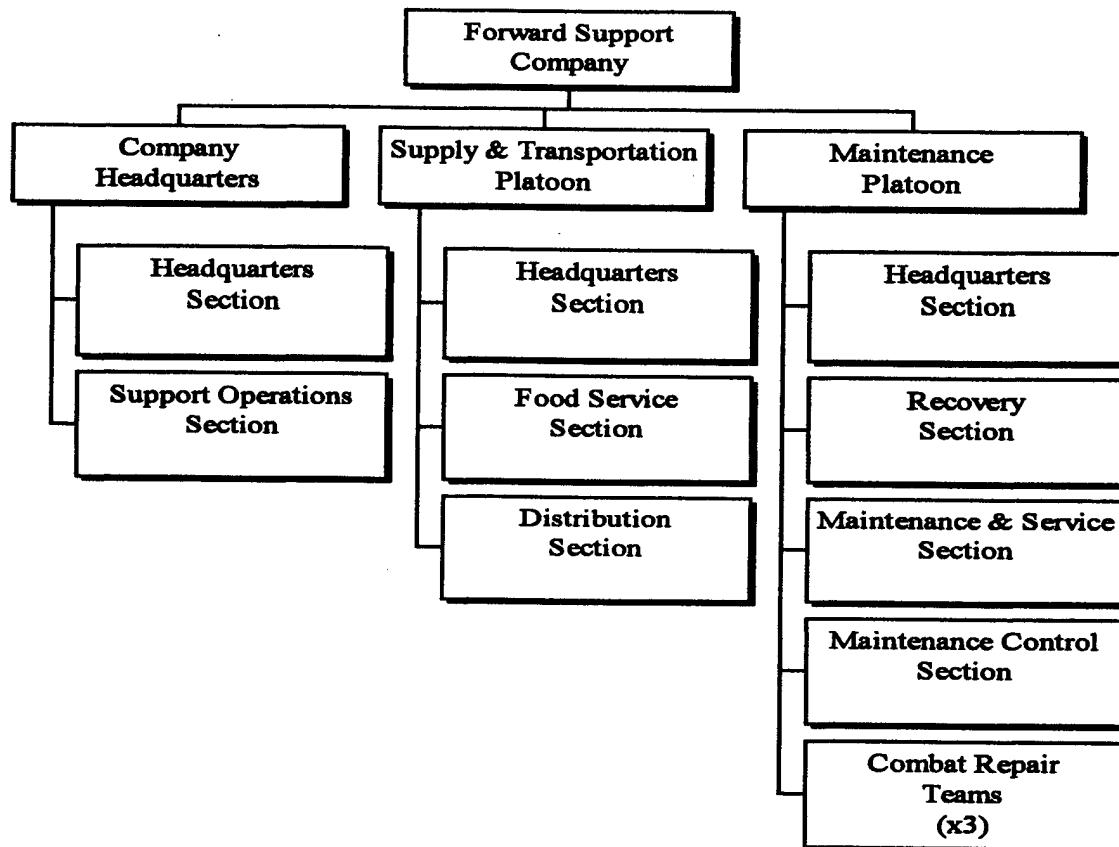


Figure 1. FSC Organizational Structure (CASCOM, 1998)

Support Operations Officer's Responsibilities

The FSC support operations officer is responsible for coordinating and synchronizing the logistical support for the CAB that the FSC supports. These responsibilities were analyzed to determine the SKBs that must be developed for the lieutenant to serve as a support operations officer in the FSC. Early in the design of the FSC concept, there was discussion that a major should command the company and that a

captain should serve as the support operations officer due to the complexity of mission. Although there are several reasons a major could not command the FSC, the primary reason was due to the shortage of CSS majors (Palmer 1998, 9). As of August 1998, a captain will command the FSC and the support operations officer will be a lieutenant. Nevertheless, the argument of a major serving as commander and a captain serving as support operations officer was based on the expected high-operational tempo, the advanced technological enablers, and the ability to coordinate and plan CSS for anticipatory logistics support (Palmer 1998, 8-9).

Force XXI Technological Enablers

Technological changes in automation are critical to enhancing logistics management and the Force XXI logistical concept. The increased amount of information available to the CSS leader and staff officer, through the Combat Service Support Control System (CSSCS) and the Force XXI Battle Command Brigade and Below (FBC2B2), is an enhancement that allows the proposed organizational and doctrinal changes in the FSC. The support operations officer uses the CSSCS and the FBC2B2 to maintain the situation awareness that is required to perform anticipatory logistics (CASCOM 1998, 16-17).

The FSC support operations section uses the CSSCS to provide visibility of maintenance, supply, and distribution information through the CSS pipeline at all levels (CASCOM 1998, 8). The support operations officer uses this information to coordinate and synchronize the support for the CAB with key leaders in the CAB and the FSB. The automated systems are a CSS force multiplier for the FSC, providing a tool to balance limited resources and command priorities when supporting the CAB. Figure 2 illustrates

how the use of these automation systems allows logistical management functions to move from the FSB to the FSC. The illustration also demonstrates how a lieutenant serving as FSC support operations officer needs to have SKBs normally associated with a major or senior captain serving as a FSB support operations officer.

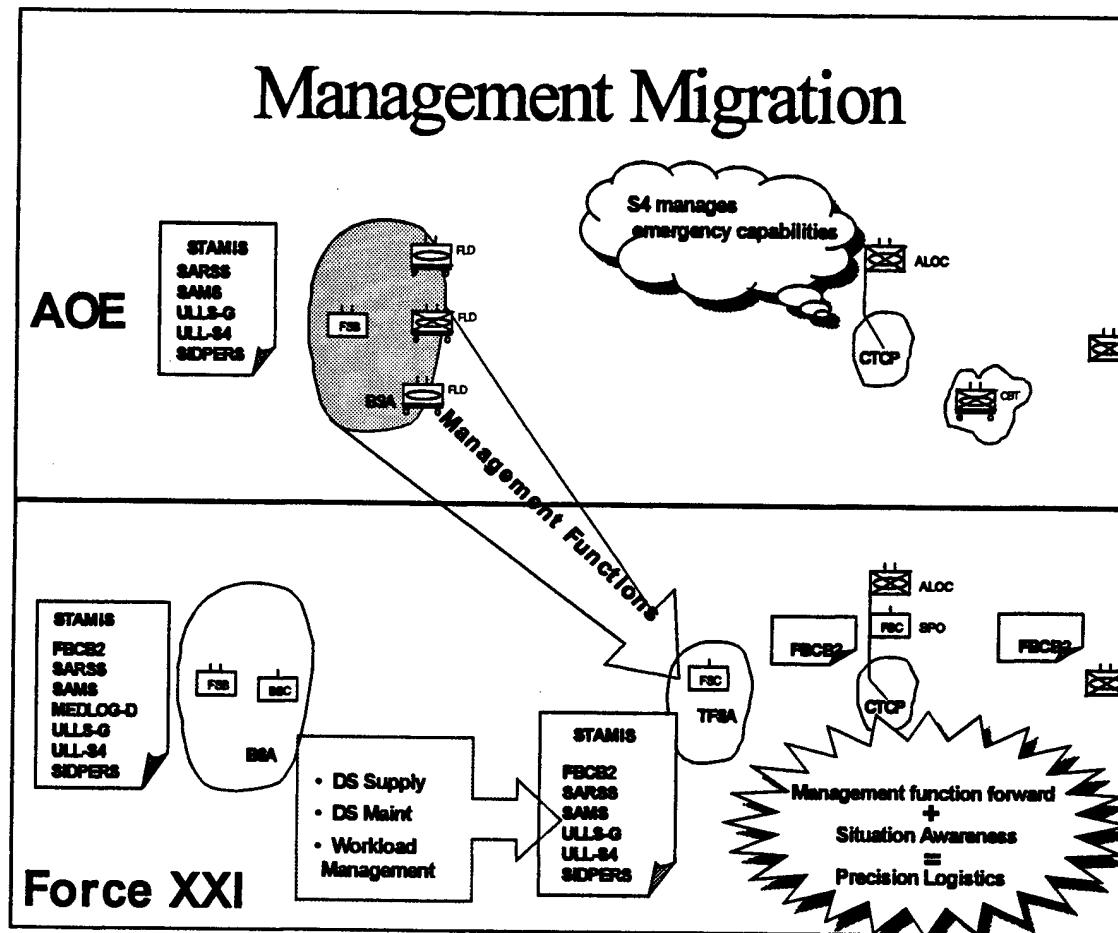


Figure 2. (CASCOM, 1998)

FSC Training Support Plan Tasks

CASCOM developed a training support plan (TSP) for the FSC. Captain Rodney Palmer used this TSP to develop and validate a FSC commander's critical task list in his work, "A Study to Identify Critical Tasks and Develop a Training and Developmental Plan for the Forward Support Company Commander Position," which involved the training of the FSC Commander. "Coordinate company support operations" is a task on both lists. This task is further divided into subordinate tasks. These subordinate tasks served as the cornerstone of this study in that they provided the basis on which the SKBs were identified and analyzed in order to design a professional development plan to train CSS lieutenants to serve as FSC support operations officers. The TSP task (coordinate company support operations) is subdivided into the following tasks:

1. Supervise FSC support operations section.
 - a. Assign areas of responsibility and work schedules consistent with phases of maneuver company's operations;
 - b. Monitor performance of support operations element personnel to ensure compliance with commander's guidance and TSOP;
 - c. Identify possible future requirements by analyzing LOG SITREP and summarized data from company 1SGs to CTCP through CSSCS;
 - d. Coordinate CSS policies and mission changes with the maneuver battalion S4 and subordinate elements, maximizing use of orders or requests, overlays, and CSSCS;

e. Direct lateral distribution of assets as driven by changing requirements and priorities in accordance with maneuver battalion S4's guidance using orders or requests and CSSCS; and

f. Direct redistribution of CRTs maintenance workload in accordance with maneuver battalion S4's guidance using orders or requests and CSSCS.

2. Support operations section monitors mission support operations.

a. Identify all FSC's specified and implied tasks in the maneuver battalion and FSB's operations orders;

b. Confirm all identified specified and implied tasks in coordination with maneuver battalion's S4 representative and FSC support operations personnel in the CTCP;

c. Verify the task organization of the company support teams to match the needs of the supported maneuver companies using CSSCS;

d. Track the location of friendly and enemy icons using CSSCS;

f. Monitor reporting between the company first sergeants and the CTCP;

g. Disseminate pertinent digital information to FSC commander and co-located FSC elements, using CSSCS;

h. Task appropriate FSC elements to fill "call for support" requests from maneuver company's first sergeant, using CSSCS; and

i. Forward "call-for-support" requests, that are beyond the FSC's capability, to the FSC support operations section using CSSCS.

By design, the TSP provides an excellent tool for the commander to train his unit. However, for this study, the tasks had to be further developed into SKBs for the

support operations officer in order to address the professional development of CSS lieutenants in preparation for the FSC support operations officer position. Essential to the SKBs of the support operations officer is his understanding of the tactical logistics functions and the relationship these functions have to each other and to the CAB.

Tactical Logistics Functions

The support operations officer must understand the tactical logistics functions in a manner that is consistent with the characteristics identified in DA PAM 350-58, *Leader Development for America's Army*:

1. Anticipate, manage, and exploit change;
2. Accurately assess situations, solve problems, and act decisively under pressure; and
3. Clearly provide purpose, direction, motivation, and vision to their subordinates while executing operations following their superior's intent (DA PAM 350-58 1994, 2).

This understanding of the tactical logistics functions was essential to developing the SKBs because it provided the foundation to perform multifunctional logistics in an anticipatory manner. With Force XXI logistics still in its infancy, comparisons to the Army of Excellence (AOE) systems provided a better understanding of responsibilities placed on the FSC support operations officer. Below is a brief comparison between the AOE and Force XXI CSS systems by five of the tactical logistics functions (arming, fueling, fixing, moving, and sustaining) that are the foundation of the FSC 's mission.

Arm

“Arming the force requires detailed planning and coordination among the combat users and the ammunition and transportation logisticians at all levels” (FM 100-5 1993, 12-11). The support operations officer in the FSC is the first link of that planning and coordination between the user and the logistician. Force XXI provides several enablers to make the Class V aspect of arming more effective and efficient. Two of these changes are in the packaging and movement of Class V. Strategic configured loads (SCLs) allow ammunition to move from echelons above division (EAD) down to the ammunition transfer point (ATP) in the brigade rear. The FSC then moves the Class V to the maneuver units, where the container can be dropped. The maneuver unit can unload the container without materiel handling equipment (MHE) because of the containerized roll on or off platform (CROP). For successful ATP operations to occur, the FSC support operations officer must stay in communication with the FSB and maneuver unit to maintain situation awareness for Class V distribution, plus maintain accountability of CROP containers. The FSC support operations officer’s understanding of this system allows him to anticipate, manage, and solve problems as they occur.

Fuel

Fueling the force in Force XXI may be the most challenging of the tactical logistics functions. “Providing clear priorities for fueling, accurately estimating fuel consumption, and economizing assets whenever possible contribute to ensuring adequate support of operations” (FM 100-5 1993, 12-11). The support operations lieutenant will need to maintain oversight of the three areas mentioned above. The FSC will have to execute the fuel mission with fewer assets. Daily fuel requirements are anticipated to

increase in Force XXI while the number of fuel handlers and fuel equipment assets will decrease (Quartermaster XXI 1998, 6-7). It is incumbent on the support operations officer to maintain accurate situation awareness to insure battlefield success. Force XXI Battle Command Brigade and Below (FBCB2), Combat Service Support Control System (CSSCS), and Movement Tracking System (MTS) are automation enablers that must be used by the support operations officer to manage the fuel resupply mission.

Synchronizing the availability of assets for the support mission and coordinating the resupply, which will primarily come from Corps throughput, is a primary responsibility of the support operations section. The support operations lieutenant will be the key coordinator for communicating requirements through the system and synchronizing the resupply deliveries. By moving the management function forward to the FSC support operations section, which has situation awareness, precision logistics can be accomplished (CASCOM 1998, 17).

Fix

Sound maintenance practices, forward positioning of maintenance capabilities, quickly accessible repair parts, and well-understood priorities for recovery and repair may determine success on the battlefield (FM 100-5 1993, 12-11). Force XXI moves maintenance capabilities as far forward as possible. Changing from the AOE concept of fix forward and repair in the rear, Force XXI replaces components forward and fixes the components in the rear (Ordnance XXI 1998, 6). Combining organizational and DS maintenance capabilities and moving that capability forward to the FSC accomplish this concept. The support operations officer has visibility of organizational and DS management in the task force support area (TFSA). The Forward Repair Systems—Heavy

(FRS-H) provides the enhanced capability to move DS support forward without requiring equipment that may be used for recovery operations.

The support operations section coordinates with the maintenance platoon, the maneuver element, and the FSB for maintenance and recovery operations. Situations may require the FSB support operations officer to provide additional support to another battalion within the brigade. In this situation, the FSC may have to send a maintenance support team (MST) to assist another FSC within the brigade. Force XXI logistics support relies on this flexibility to place limited resources where they will have the most impact on the battlefield. The situation awareness and coordination between the support operations officers in the FSC and the FSB are critical to this flexibility. The FSC support operations officer must have a thorough understanding of this tactical logistics function to react to the changing situation on the battlefield.

Move

Executing transportation operations requires detailed preparation and extensive training and coordination between the FSB and FSC. The movement aspect of Force XXI provides an example of how changes at echelons above division (EAD) will impact the support operations officer at the FSC. Battlefield distribution relies heavily on EAD assets for support. Increased reliance on throughput from EAD all the way to the FSC will be critical to distribution success. The support operations officer is the key logistician for planning and coordinating the transportation linkup between higher CSS units and the FSC. Automation enhancements, such as Movement Tracking System (MTS) and Total Asset Visibility (TAV), provide the situation awareness the support operations officer needs to coordinate battlefield distribution. Other enhancements, such

as the CROP and SCLs, were mentioned in the earlier discussion of ammunition, demonstrating the impact that transportation has on the other tactical logistics functions. The support operations officer's understanding of how transportation assets impact the other tactical logistics functions is key to the success of the FSC in performing its mission.

Although leaders tend to take for granted the tactical logistics function of move, extensive coordination to move units and materiel is often coupled with short-notice changes in plans (FM 100-5 1993, 12-11). These changes require the support operations officer to be knowledgeable of transportation systems and be able to maintain the flexibility to integrate transportation into the overall CSS mission despite unanticipated changes in requirements.

Sustain

The five elements of sustainment are personnel services, health services, field services, quality of life, and general supply support. The diversity of this tactical logistics function is more complex than this summary will address. There are two elements that are of primary concern to the support operations officer in the FSC, general supply support and field services (food service operations and water), because the support provided for these two elements are primary missions of the FSC. These areas require daily planning and coordination efforts on the battlefield and are performed with assets and by personnel that are organic to the FSC. The timing of general supply management and of Class I management are heavily dependent on the tactical situation and logistical awareness--a critical responsibility since there are smaller stockpiles of supplies for

flexibility. The support operations officer must maintain accurate awareness to coordinate and manage a responsive distribution pipeline.

Other elements of sustainment, such as health services, and laundry and bath services, require situational logistical planning and coordination by the support operations officer. Since soldiers outside of the FSC perform these missions, the support operations officer must be the subject matter expert for the FSC on these areas. He must integrate this support into the mission with little or no impact on competing resources required to do the daily FSC mission.

Summary of Tactical Logistics Functions

The background comparison of the AOE and Force XXI systems provided an overview of the multifunctional logistics responsibilities of the support operations officer in the FSC. This comparison suggested that CSS operations in Force XXI required a lieutenant who understands multifunctional logistics and is able to use automation systems to maintain a situation awareness that produces anticipatory logistics instead of reactionary logistics. The importance of the FSC support operations officer's understanding of the tactical logistics functions within the responsibilities identified in the TSP and the skills and knowledge required to use the automation enablers was analyzed. The identification of the SKBs required for the FSC support operations officer to perform his duties was the result of the analysis of this background information.

Desired SKBs of the FSC Support Operations Officer

A list of SKBs was developed as a result of analyzing the secondary data used to develop the background of Force XXI logistics. The following list of SKBs represents

common attributes and skills identified during the review of the secondary data that are important for the FSC support operations officer to successfully perform his duties:

1. Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB;
2. Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2);
3. Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations;
4. Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders or requests to perform anticipatory logistics management;
5. Possess the skills required to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB;
6. Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics; and
7. Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.

This list of SKBs was essential to the professional development plan that was drafted as part of this study to develop CSS lieutenants to serve as FSC support operations officers. The desired SKBs of the support operations officer were employed in a survey of SMEs to assist in the design of the professional development plan. The professional development plan was designed using Kotter's eight-stage process of change as a guide and incorporated the Army's leader development system.

The FSC Support Operations Officer Professional Development Plan

As a result of this study, a FSC Support Operations Officer Professional Development Plan was drafted identifying the framework that can be refined by institutional and operational CSS leaders. The professional development plan can be tailored to the individual lieutenant's and the organization's needs by the operational leader as required. The institution serves as the lead agency in developing and updating the plan, while the operational leader implements the plan in a tailored fashion to train the individual lieutenant in the desired SKBs. The plan used Kotter's eight-stage process of change as a guide. The plan also incorporated the Army leader development system as the method of training. A lieutenant will most likely become the FSC support operations officer between his second and third year of service. In order to prepare the lieutenant to be a support operations officer in this short period of time, the Army's three-pillar approach to leader development must be carefully managed. To assist in the management process of training the lieutenant, a systematic approach to the overall professional development plan was required.

Kotter's Eight-Stage Process of Change

Kotter identified an eight-stage process to successfully produce change based on eight common errors that he observed in his experience as a consultant and as a Professor of Leadership at Harvard Business School (Kotter 1996, 20).

- 1. Establishing a sense of urgency.**
- 2. Creating the guiding coalition.**
- 3. Developing a vision and strategy.**
- 4. Communicating the change vision.**

5. Empowering broad-based action.
6. Generating short-term wins.
7. Consolidating gains and producing more changes.
8. Anchoring new approaches in the culture.

The first four steps in the transformation process help defrost a hardened status quo. If change were easy, you wouldn't need all that effort. Phases five to seven then introduced many new practices. The last stage grounds the changes in the corporate culture and helps them stick. (Kotter 1996, 22)

Overview of the Army Leader Development System

"Army leaders gain their skills, knowledge, and behaviors (SKBs) through a combination of schooling, assignments, and self-development" (DA PAM 350-58 1994,

3). The Army leader development system teaches officers the skills needed to perform in their current assignment and develops them to assume higher levels of responsibility (Craig 1998, L7-4). The current Army leader development system, designed in 1987, consists of three pillars: institutional training and education, operational assignments, and self-development.

Institutional Training and Education

Institutional training and education provides the foundation for leader development. It is a foundation on which unit commanders and supervisors can build, mold, and shape leaders and on which the developing leaders can base their self-development. (DA PAM 350-58 1994, 19)

Institutional training normally occurs as a precursor to an operational assignment at a new level of responsibility. Officer basic course (OBC) develops a lieutenant for his initial operational assignment for his particular branch. For CSS officers, OBC prepares the lieutenant for a functional platoon leader position. As the lieutenant reaches four

years of service, he can expect to be promoted to captain and attend the officer advanced course (OAC). CSS captains attend the Combined Logistics Officer Advanced Course (CLOAC) which prepares captains to serve as company commanders and multifunctional logistics staff officers at battalion and brigade level. CLOAC also provides the institutional training that is consistent with the responsibilities required by the FSC support operations officer.

Force XXI moves management functions that were associated with the FSB in support of a maneuver brigade to the FSC in support of a maneuver battalion (CASCOM 1998, 16-17). This shift in responsibilities requires the FSC support operations officer to have SKBs normally not mastered until reaching the rank of captain or a major serving in the FSB. Since the lieutenant will not have the opportunity to attend CLOAC prior to serving as the FSC support operations officer, an alternate means of developing the SKBs required for this position must be proposed. This study analyzed alternative institutional training methods combined with operational, and self-development initiatives to develop the CSS lieutenant in the desired SKBs.

Operational Assignments

Operational assignments should place leaders in positions that enhance SKBs acquired during institutional training and education. Repetitive performance of duty position requirements (practice) refines skills, broadens knowledge, and shapes behavior--and possibly attitudes. During operational assignments, leaders gain the experience needed for more complex and higher-level assignments. (DA PAM 350-58 1994, 25)

Commanders provide leader development opportunities by making deliberate decisions to assign officers to a variety of duty positions as well as additional duties within the organization. “Even if commanders do nothing to consciously shape

subordinate leadership growth, the operational environment provides the experience for leaders to learn and adequately perform their duties" (Craig 1998, L7-4). However, commanders and supervisors at all levels have an inherent responsibility to develop subordinates to progress to the next level of responsibility. Commanders, who understand their responsibility in leader development and the advantage the operational setting provides for realism, will have the greatest influence on the development of subordinate officers (Bransford 1998, 8).

Operational assignments normally provide the "on-the-job" training opportunities that often cannot be duplicated in an institutional environment. Commanders that take advantage of these opportunities by incorporating leader development with collective training are able to produce confident, competent leaders and mission-ready units. Battalion leader development programs are essential to developing junior leaders to assume the next level of responsibility in the near term. Battalion leader development programs that use a certification program can instill pride and self-confidence as well as be used as a tool for the selection and assignment of leaders (Craig 1998, L7-12 and L7-13). A challenging leadership development program that uses certifications to link future assignment possibilities is an excellent tool to motivate officers in self-development.

Self-Development

Self-development programs should be tailored to meet changes in the environment, the unique status of organization missions, and the individual's development needs and professional interests. The concept of self-development places responsibility squarely on the leader to do his share to attain and sustain competency. Every leader is responsible for his own professional development. (DA PAM 350-58 1994, 34)

Self-development is a continuous process that requires an officer to be a student of his profession. Leaders can use formal educational means, such as Army correspondence courses and civilian education classes, to maintain or develop new SKBs. Professional reading to maintain currency in a leader's particular specialty is an excellent self-development tool that can be structured within the battalion leader development program. Being accountable to a mentor in one's self-development program promotes self-discipline and assures success. When a relationship exists between the battalion leader development program and the self-development responsibilities of the individual leader, both pillars of leader development become stronger. A strong leader development model that intertwines institutional, operational, and self-development pillars to support a well-conceived professional development plan is required to train CSS lieutenants to serve as FSC support operations officers.

Designing the Professional Development Plan

As a result of this research, a FSC Support Operations Officer Professional Development Plan was drafted (Appendix B) to provide the framework in preparing the CSS lieutenant to serve as the support operations officer. The plan used Kotter's eight-stage process of creating change as a format to capture how the three pillars of the Army leader development model can be employed to train the FSC support operations officer in the desired SKBs. The importance of the SKBs, identified by the researcher, was prioritized using a survey of SMEs. This survey also suggested particular manners in which to use the three-pillar approach in developing the lieutenant professionally. The intent of the professional development plan was to provide institutional and operational

leaders a guide to refine and implement the FSC Support Operations Officer Professional Development Plan.

Summary of the Thesis

The purpose of this study was to determine whether the Army needs to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC of the Force XXI division?

While answering the research question above, there were three subordinate questions answered during this study.

1. Which SKBs are most important for the FSC support operations officer to successfully perform his duties?
2. Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties?
3. Which of the three Army leader development pillars (institutional, operational, or self-development) should be used to as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC?

A product of this thesis is a professional development plan that can be refined by institutional and operational leaders to develop CSS lieutenants in the SKBs required to serve as the FSC support operations officer.

Scope

The thesis analyzed the development of CSS lieutenants in SKBs to perform as a support operations officers in the FSC. Based on input from key leaders who have Force XXI experience, the primary question and subordinate questions, identified above, were

answered and ultimately a professional development plan to prepare CSS lieutenants to serve as support operations officers in the FSC was drafted.

Limits

This study only addressed what SKBs are important for the professional development of CSS lieutenants to serve as the support operations officer in the FSC and how to accomplish this development task. The professional development requirements of the individual CSS lieutenant to serve as the support operations officer are situation dependent. This study addressed this development issue in a general context and was based on several assumptions that make this approach easier for CSS lieutenants who serve in a FSB as opposed to branch-detailed officers serving in the CAB. However, if possible, CSS lieutenants who are branch-detailed to the CAB can gain professionally by participating in the FSB's professional development program and should be encouraged to do so.

Assumptions

This thesis was based on several assumptions pertaining to Force XXI and to opportunities for professional development of CSS lieutenants:

1. Desired SKBs for the support operations officer of the FSC can be added, deleted, or changed after this study is completed, and the concept of the professional development plan will remain valid.
2. The professional development plan is designed assuming the FSC support operations officer will be a lieutenant who has served in the FSB or branch-detailed to the CAB for two or more years.
3. The FSC will be under the command and control of the FSB commander.

4. The FSC concept will be implemented in every active duty Army division.
5. The FSC organization structure, capabilities, and mission will remain relatively constant as it is identified as of August 1998.

Key Terms

Battle-Space. The physical space that expands or contracts in relation to the ability to acquire and engage the enemy. It includes the breadth, depth, and height in which the commander positions and moves assets over time.

Classification Research. The process of sorting a collection of people or objects and of developing a set of categories among which you divide the collection.

Combat Service Support. The synchronization of essential functions, activities, and tasks necessary to sustain soldiers and their equipment in an area of operations that include, but is not limited to, the support rendered by a service support unit to man, arm, fuel, fix, move, and sustain the soldiers and their equipment.

Empirical Research. Denotes observations and propositions primarily based on sense experience and derived from such experience by methods of inductive logic, including mathematics and statistics.

Functional Area. A grouping of officers by career field other than designated branch who possess an interrelated grouping of tasks and skills usually requiring significant education, training, and experience. Officers may be placed into only one functional area.

Functional Area 90. A dual-track functional area for active duty officers. Multifunctional logistics officers with experience in integrating the functions of supply,

transportation, maintenance, aviation logistics, medical service administration, and field services.

Logistics. The provision of personnel, supplies, transportation, equipment, and other support required to maintain and prolong operations or combat until successful completion of the mission.

Multifunctional Logistician. A CSS officer whose background through training or experience involves two or more CSS functions. An officer who possesses a FA 90 designation is considered a multifunctional logistician.

Multifunctional Logistics. The combination of two or more of the logistical functions (supply, transportation, field services, maintenance, aviation logistics, or medical service logistics).

CHAPTER 2

REVIEW OF LITERATURE

Introduction

A review of literature was conducted to determine, to date, what impact Force XXI logistics had on the leader development of CSS lieutenants in preparation to serve as a support operations officers in the FSC of the Force XXI division. The review of secondary sources revealed information pertaining to Force XXI logistics, the FSC mission, and the role of the FSC support operations officer. However, very little information existed that discussed how the Army would prepare the CSS lieutenant to assume the multifunctional logistics responsibilities that would be incumbent upon his position as the FSC support operations officer. This study filled the void that existed between identifying the support operations officer's responsibilities and training a CSS lieutenant to assume those responsibilities.

In order to link Force XXI logistics initiatives with the requirement to train CSS lieutenants, the following literature review methodology was used. Secondary data were used to obtain a higher level of understanding of Force XXI logistics and the role the FSC plays in this new concept. Next, the literature review was narrowed to the support operations officer's responsibilities, which provided the foundation for developing the desired SKBs required for this study. The review of literature continued with secondary data that provided the basis on which a professional development plan to train CSS lieutenants in the desired SKBs was designed. A survey was used to collect primary data to prioritize the SKBs and identify the primary means in which to train the CSS lieutenant. Finally, this collection of information was employed to design a professional

development plan that institutional and operational CSS leaders can refine and implement to train CSS lieutenants to serve as the FSC support operations officer.

While this study was being conducted, the Force XXI division design was still limited to the 4th Infantry Division and in the testing stages of implementation. Nevertheless, the purpose of this study was to design a professional development plan for CSS lieutenants that would be used in the future, when the Force XXI division design is present throughout the Army. To insure the professional development plan would remain relevant in the future, proven doctrine and training systems were used as the foundation of this study. The tactical logistics functions were used to guide the development of the SKBs for the FSC support operations officer. The Army leader development system was used as the training method. Kotter's eight-stage process for creating change served as format to display the professional development plan. To accomplish the goals established for this thesis, an incremental literature review concept was employed.

Concept of the Literature Review

After gaining a broad understanding of Force XXI logistics and the responsibilities of the FSC, the review focused on the problem statement and the subordinate problems that were analyzed during this study. Information was gathered and organized by the three subordinate problems:

1. Which SKBs are most important for the FSC support operations officer to successfully perform his duties?

2. Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties?

3. Which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC?

The three subordinate questions are interrelated; therefore information was transferred as required to create a successive flow from identifying the support operations officer's responsibilities to his development of the desired SKBs required to perform his duties. The concept of the literature review was to gain knowledge from a broad perspective to more precise ones. This concept educated the researcher on general Force XXI logistics then migrated to more specific information on the three subordinate problems of this study. The information gathered from this process provided the background in chapter 1, the research method in chapter 3, and conceptual input for chapter 4, chapter 5, and appendix B.

Within the research methodology, a survey was designed from the secondary data pertaining to the FSC support operations officer's responsibilities and the Army leader development system. The primary data from the survey established the relationship between the FSC support operations officer's responsibilities and the Army leader development system. This relationship established the basis of the professional development plan in appendix B.

Figure 3 depicts the concept of the literature review. There are four purpose subsets aligned with the sources used to gather information for that subset.

CONCEPT OF LITERATURE REVIEW

<u>PURPOSE</u>			
UNDERSTAND FORCE XXI LOGISTICS AND FSC MISSION	IDENTIFY SPT OPS OFFICER RESPONSIBILITIES AND CREATE SKBs	UNDERSTAND ARMY LEADER DEVELOPMENT SYSTEM TO DESIGN PROFESSIONAL DEVELOPMENT PLAN FOR CSS LIEUTENANTS	SME SURVEY
<ul style="list-style-type: none"> - PERIODICALS - PATE'S STUDY - CASCOM BRIEF - FORCE XXI CONCEPT FOR CSS - PALMER'S STUDY 	<ul style="list-style-type: none"> - PALMER'S STUDY - FSC DRAFT TSP - CASCOM/ PROPOONENT BRIEFS - SPT OPS HANDBOOK - FM 100-5 	<ul style="list-style-type: none"> - DA PAM 350-58 - FM 22-100 - PALMER'S STUDY - BRANSFORD ARTICLE - CRAIG ARTICLE - LEADING CHANGE 	<ul style="list-style-type: none"> - BASIC RESEARCH METHODS - SURVEY RESEARCH METHODS - ASKING QUESTIONS
<u>SOURCE</u>			

Figure 3

Force XXI Logistics and the FSC

Periodicals, such as *Army Logistician*, *Quartermaster Professional Bulletin*, and *Transportation Professional Bulletin* provided the best sources for broad and conceptual information on Force XXI logistics. Additionally, a monograph by MAJ Steve Pate, "CSS Operations in Support of Force XXI Division Redesign: A Bridge to the Future or Before its Time" provided a general understanding of Force XXI logistics by comparing Force XXI and the AOE systems using the six tactical logistics functions. Periodicals and papers provided an understanding that the Army's logistics goal for Force XXI was

to enhance efficiency, despite limited resources, through technology in order to maintain effectiveness. Next, a more thorough understanding of the FSC mission was required. Two particular sources were instrumental to understanding the logistical impact of the FSC in the Force XXI division design.

Force XXI Division Concept for Combat Service Support Operations

Summary

This handbook, dated 15 May 1998, provided the best conceptual information for division CSS operations in Force XXI. This source provided organizational structure and an overview of responsibilities for each logistics unit in the division to company level. It also summarized CSS operations to include the impact of automation enablers for each tactical logistics function. Although similar information was available in different studies and periodicals this document was an excellent single source for this study and was particularly pertinent in several areas.

Relevance

This handbook was used to provide the FSC background information for organization structure and mission responsibilities. Since this document addressed every logistical organization in the division it was broad in nature and only a small portion addressed the FSC specifically. Nevertheless, a concise description of the command and control flexibility the FSC provides to the FSB commander to logically influence the battle was informative. To logically influence the battlefield, the FSB commander relies heavily on the SKBs that his support operations officers in the FSB and FSCs possess. Additionally, since this source was dated 15 May 1998 it was used to confirm the currency of information obtained from earlier dated sources.

“CASCOM FSC Overview Brief”

Summary

The “CASCOM FSC” Overview Brief addressed general conceptual information pertaining to the FSC’s responsibilities. Command and control, situation awareness through automation enablers, and the movement of FSB responsibilities to the FSC were discussed in this document. This brief took place in January 1998 and assessed the rationale of the FSC as a part of the FSB as opposed to the maneuver battalion. Enhanced CSS flexibility, which relies on massing capabilities, back-up support, and cross-leveling assets was a primary argument for the FSC to be under the FSB control (CASCOM Overview 1998, 26). Additionally the argument was presented that this would allow the combat arms battalion (CAB) commander to focus on the warfighting effort and logisticians to focus on CSS. The CASCOM brief also presented an excellent picture that demonstrated exactly how situation awareness allows logistics management functions to be performed in the FSC as opposed to the FSB in order to accomplish precision logistics.

Relevance

The CASCOM brief had significant relevance to this study because it not only summarized the FSC’s responsibilities but it also transitioned the FSC responsibilities to the support operations officer’s responsibilities. The “Management Migration” chart from this brief which depicted the movement of logistics functions forward from the FSB to the FSC supported the rationale that the SKBs required of the FSC support operations officer were in essence SKBs that the Army expects of senior captains and majors. This argument was the foundation that a requirement existed to design a professional

development plan in order to prepare a CSS lieutenant for responsibilities that are traditionally expected of more senior CSS officers.

Support Operations Officer's Responsibilities and SKBs

Once an understanding of Force XXI logistics and the responsibilities of the FSC were established, the focus was narrowed to the support operations officer's responsibilities. The support operations officer's responsibilities were used as a baseline for the development of the SKBs that would be analyzed in this study. The researcher subjectively assessed the responsibilities taken from a draft CASCOM Training Support Plan (TSP) and the tactical logistics functions, in relations to the FSC mission, to develop the SKBs. Using this assessment insured a thorough and proven means of evaluation. Several particular sources were instrumental to understanding the support operations officer's responsibilities and how they would form the desired SKBs.

"A Study to Identify Critical Tasks and Develop a Training and Development Plan for the Forward Support Company Commander Position"

Summary

Rodney Palmer's thesis, "A Study to Identify Critical Tasks and Develop a Training and Development Plan for the Forward Support Company Commander Position," analyzed a draft CASCOM Training Support Plan (TSP) for the FSC that subdivided the CSS responsibilities into five tactical logistics functions. Palmer's study focused on the FSC commander's responsibilities, which encompassed the support operations officer's responsibilities. Palmer used the TSP to develop a FSC commander critical tasks list. This critical task list was then compared to the program of instruction (POI) of the Combined Logistics Officer Advanced Course (CLOAC) to determine if the

POI provided the institutional training to prepare the CSS officer to command the FSC. His analysis showed that the course addressed 70 percent of the critical tasks and that the captain would have to receive additional training to be most effective as the FSC commander. Two of the three primary shortfalls identified (knowledge of automation enablers, particularly FBCB2, and LOGPAC operations) were directly related to the support operations officer's responsibilities.

Relevance

Besides the parallel between Palmer's research and this study, Palmer's study provided a thorough source of information for responsibilities and training requirements. This source was used to capture the support operations officer's tasks from the TSP and the FSC commander's critical task list. Palmer's study concluded that the FSC commander required additional training to successfully perform his duties. The support operations officer, who will not attend CLOAC prior to assuming this position, is expected to serve as the primary logistics coordinator or synchronizer for the FSC. This training challenge leads directly to the primary question of this thesis, Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC? One of Palmer's recommendations was that a study determining the best method to train the FSC support operations officer be conducted.

"Quartermaster XXI Overview Brief"

Summary

The "Quartermaster XXI Overview Brief" provided concise information that compared the AOE logistics systems with the Force XXI logistics systems in the fuel and

sustain tactical logistics functions. These charts highlighted the differences between the two systems then identified risks and enablers of the Force XXI systems. The highlights included the importance of situation awareness in performing anticipatory logistics, and that a distribution-based system replaces a supply-based system.

Relevance

These briefing charts were useful because they highlighted the specific differences in Force XXI fuel and sustain tactical logistics functions when compared to these functions in the AOE. This information was beneficial in developing the FSC support operations officer SKBs. The understanding of these logistics functions will directly impact the support operations officer's ability to perform anticipatory logistics and synchronize LOGPAC operations. The information pertaining to the tactical logistics functions was also employed in the SME survey to enhance the focus of the professional development plan.

"Ordnance XXI Overview Brief"

Summary

This source rendered concise information that compared the AOE and the Force XXI tactical logistics functions of arm and fix. These charts highlighted the differences between the two systems then identified risks and enablers of the Force XXI systems. Highlights included the importance of situation awareness in order to perform anticipatory logistics, and specific equipment upgrades that affect the CL V distribution system and tactical field maintenance operations.

Relevance

The information from this brief was useful in developing the FSC support operations officer SKBs. The understanding of these tactical logistics functions will directly impact the support operations officer's ability to perform anticipatory logistics and synchronize ATP and maintenance support operations. Information related to arming and fixing was also employed in the SME survey to enhance the focus of the professional development plan.

"Transportation XXI Overview Brief"

Summary

These charts highlighted the differences between the AOE and Force XXI tactical logistics function of move. Risks and enablers of the Force XXI systems were identified. Highlights included the importance of situation awareness in order to perform anticipatory logistics, and the heavy reliance of throughput distribution.

Relevance

The information from this brief was useful in developing the FSC support operations officer SKBs. The understanding of this tactical logistics function will directly impact the support operations officer's ability to perform anticipatory logistics and coordinate the battlefield distribution of all classes of supplies (-CL VIII). Information related to this tactical logistics function was also employed in the SME survey to enhance the focus of the professional development plan.

The FSC Support Operations Officer Professional Development Plan

The review of literature continued with the collection of information that served as the basis in designing a professional development plan for CSS lieutenants. To insure

the professional development plan would remain relevant in the future and consistent with Army training doctrine, the Army leader development system was incorporated as the training method in the FSC Support Operations Officer Professional Development Plan. DA PAM 350-58 was the primary source used to learn how the Army leader development system was designed. Articles from periodicals described how to maximize the operational and self-development aspects of the Army leader development system. Kotter's eight-stage process of change was used as a blueprint to defeat resistance and obstacles expected with a change of this magnitude. Three particular sources were instrumental to understanding the Army leader development system and designing the professional development plan in appendix B.

DA PAM 350-58, *Leader Development for America's Army*

Summary

The DA PAM 350-58 outlined Army leader development doctrine. This publication described the leader development system in terms of principles, imperatives, responsibilities, and a process that centered on a three-pillar model that serves as the foundation of the system. The three pillars (institutional, operational, and self-development) guide the development of leaders in SKBs in a progressive manner to prepare leaders for increased levels of responsibility. The Army leader development system applies to officers, warrant officers, non-commissioned officers and DA civilians in the active and reserve components of the Army.

Relevance

DA PAM 350-58 was the primary source used to understand the Army leader development system and how to design the training method of the FSC Support

Operations Officer Professional Development Plan. After gaining a better understanding of the leader development system, desired SKBs for the support operations officer were developed to enhance the professional development plan. Use of the three-pillar model was influenced by surveying SMEs in the most effective way to train CSS lieutenants in the desired SKBs.

“Designing a Battalion Leadership Development Program: Theory and Practice”

Summary

Major Donald M. Craig's, “Designing a Battalion Leadership Development Program: Theory and Practice,” identified methods for using the Army leader development model to develop leaders in the qualities found in the new 1999 FM 22-100, *Army Leadership*. This article focused on the individual leader responsibilities for self-development and for development of subordinate leaders in an operational setting. The author suggests that a battalion commander can use portions of the model to create a comprehensive leadership development program.

Relevance

This source was useful in designing the FSC Support Operations Officer Professional Development Plan. Craig suggested battalion commanders employ a comprehensive leader development program that combines self-development and operational training. The program must be focused on the unit mission and the individual leader's needs. Goals established and objectives required to achieve these goals must be identified. Finally, a method to train the leader in that specific area must be distinguished. Craig further recommends a certification program be used to manage the

leader's development. These recommendations were important considerations for designing the FSC Support Operations Officer Professional Development Plan.

Leading Change

Summary

John Kotter's book provided a systematic approach for organizations to implement major change initiatives. His eight-stage process was a result of his experience as a consultant and Professor of Leadership at Harvard Business School. He emphasized the importance of changing individual behavior and the organizational culture to stimulate change by individual initiative and organizational teamwork. Kotter's eight-stage process below combines thoroughness and flexibility to successfully implement change.

1. Establishing a sense of urgency.
2. Creating the guiding coalition.
3. Developing a vision and strategy.
4. Communicating the change vision.
5. Empowering broad-based action.
6. Generating short-term wins.
7. Consolidating gains and producing more changes.
8. Anchoring new approaches in the culture.

Relevance

Kotter's eight-stage process of creating change served as the framework for the FSC Support Operations Officer Professional Development Plan in appendix B. Within appendix B, Kotter's views were portrayed in a general form then this information was

adapted to the FSC Support Operations Officer Profession Development Plan.

Institutional and operational leaders must refine the plan produced from this study to meet intent of Kotter's model.

Development of the Research Method

The review of literature identified Force XXI logistics systems, the responsibilities of the FSC and the support operations officer, and how the Army leader development system could be used as the training model when designing a professional development plan. A research method that included a survey was then developed. Several sources were used to formulate the research method. One book by Julian Simon provided an understanding of the different methods available to the researcher. The survey given to SMEs was also a source of information used in this study.

Basic Research Methods in Social Sciences

Summary

Julian Simon's, *Basic Research Methods in Social Sciences*, described empirical research methods available to researchers and emphasized how to plan and design research. Empirical research is based on observations and experience or it can be derived from methods of inductive logic, such as statistics (Dictionary of Statistics and Methodology 1993, 40). Simon emphasized that there is no single best method to investigate a research problem, but that a thorough plan designed on sound principles will allow the researcher to make good decisions. This book provided the principles to make those decisions.

Relevance

This book served as the principal source in developing the survey for this study. Based on the purpose of this study and the fact that only one brigade of a Force XXI division existed at the time of this study, an empirical classification research method was used. This classification categorized a collection of data in very broad terms for comparison purposes. The ability to categorize the support operations officer's responsibilities in general terms was important in that every support operations position has unique characteristics depending on the type of maneuver battalion (armor, mechanized, light supported, personalities of leaders, and "local" SOPs.) The similarities in responsibilities for every support operations lieutenant were the focus of the survey and this study. This survey was the foundation of the thesis and will be discussed in more detail in chapter 4.

Developing the FSC Support Operations Officer Survey of SMEs

Summary

An eighteen-officer sample population (56 percent of the total identified population) consisting of ten combat arms (CA) and eight combat service support (CSS) officers provided data pertaining to the research question and the three subordinate questions of this study. These responses showed patterns of general consensus in what training requirements existed and how to train the CSS lieutenant in these requirements.

Relevance

The SME survey findings provided primary data that were used to guide the FSC Support Operations Officer Professional Development Plan designed in this study. The statistically significant data demonstrated a strong, demographically unbiased correlation

between the SMEs and the most important SKBs, tactical logistics functions, and how best to use of the Army leader development system. These findings, coupled with the 89 percent agreement that a specific professional development plan was needed to train CSS lieutenants to serve as the FSC support operations officers, confirmed the justification for this study. The SME survey was analyzed in depth in chapter 4.

Conclusion

The review of literature successfully provided the background information needed to develop a survey that addressed the primary and subordinate questions of this thesis. To accomplish this objective, an incremental literature review concept was employed to succinctly collect secondary data that guided the study in preparation for collecting primary data through the SME survey. There were several sources of information that were instrumental in the development of this study. However, it was the combination of information from the secondary sources and the primary source (SME survey) which provided the focus in designing a professional development plan. This plan must be refined by institutional and operational leaders for an effective FSC Support Operations Officer Professional Development Plan that the operational leader can tailor to the individual lieutenant's and the organization's needs.

The proposed FSC Support Operations Officer Professional Development Plan (appendix B) was designed to meet a requirement that resulted from the review of literature. Secondary data identified that a void existed between the FSC support operations officer's responsibilities and how to prepare a CSS lieutenant to serve in that position. Collectively secondary sources provided the following essential information that established the foundation on which this study was formed.

1. The relationship between the FSC mission, the support operations officer's responsibilities, and the differences between AOE and Force XXI in the tactical logistics functions provided the foundation for developing the desired SKBs.

2. How the Army leader development system prepares officers for future assignments, using the three-pillar model.

3. Research identified that a void existed between the support operations officer's responsibilities and his level of competency in multifunctional logistics to accomplish these responsibilities.

4. How the Army leader development system can be used as a tool to provide the training needed for CSS lieutenants to develop the SKBs needed to serve as the FSC support operations officer.

5. How Kotter's eight-stage process can guide the FSC Support Operations Officer Professional Development Plan to overcome resistance and obstacles.

Based on the review of literature, the above information was used to design the SME survey and to draft the FSC Support Operations Officer Professional Development Plan in appendix B.

CHAPTER 3

RESEARCH DESIGN

Introduction

The purpose of this study was to determine whether the Army needs to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the forward support company (FSC) of the Force XXI division? Three subordinate questions were used to guide this study through secondary and primary data collection.

1. Which SKBs are most important for the FSC support operations officer to successfully perform his duties?
2. Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties?
3. Which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC?

Research Method

An empirical descriptive survey research method was used to draw conclusions from the information collected during this study (Simon 1969, 52-53). A classification methodology was used to develop and analyze desired SKBs for the FSC support operations officer using a survey given to SMEs. A classification allowed data to be sorted into categories. This method allowed the researcher to deal routinely with individual cases and aided in summarization of differences among the categories (Simon

1969, 54-56). It was important to categorize the responsibilities of the support operations officer into core SKBs. These SKBs remain constant as opposed to specific responsibilities that may vary depending on the type of maneuver battalion (armor, mechanized, light) supported, personalities of leaders, and "local" SOPs.

The loss of individuality in a classification scheme is the basis of a persistent attack on social science. The critic says, "How can you talk as if any two different people in your survey were exactly the same?" or "How can you lump together wholesalers in Vermont and wholesalers in Louisiana when they serve very different markets?" The real question is whether or not the items are similar enough for your purposes; if so, the classification is fruitful. (Simon 1969, 57)

For the purposes of this study, the responsibilities of the FSC support operations officer were categorized into SKBs using the FSC training support plan (TSP) and five of the six tactical logistics functions as a guide. This method allowed the use of a classification scheme plus insured the professional development plan, designed in this study, remained relevant even if specific FSC responsibilities change in the future. This rationale was supported when looking at how the Army trains lieutenants in their officer basic courses. For example, although no two supply platoon leader positions are alike, they are similar enough to train quartermaster lieutenants in the same manner at the officer basic course. A classification scheme facilitated the capture of unbiased information that pertained to several similar yet different organizations. In all social-scientific topics and situations, the observers' experiences and beliefs will bias his views and recommendations in favor or disfavor of what he has seen (Simon 1969, 86). Experiences are tangible to the observer who may not be able to picture an alternative solution in his mind. The classification method will help limit the individual bias of the survey.

Secondary Data

As stated in chapter 2, secondary data were used to form a basis of knowledge on Force XXI logistics, the FSC concept, and the support operations officer's responsibilities. The three subordinate problem statements, which guided this study, were established using the knowledge gained from the secondary data. This knowledge was used to develop a survey that answered the primary problem statement and the three subordinate problem statements.

Primary Data

A survey served as the foundation of the study. Leaders who had experience in Force XXI were surveyed. The questions were designed to provide the answers needed for the classification analysis. The classification research method focused the broad subjective problem to narrow categories. This method identified which SKBs leaders consider the most important for the support operations officer and which leader development pillar should be used as the primary means to train CSS lieutenants in these SKBs.

Sample Population

It was important for this study to have a sample of officers who had experience working with Force XXI in some capacity. In order for a candidate to be considered a SME, he must have been involved in Force XXI redesign in some capacity while being assigned to CAC, CASCOM, TRADOC, the 4th ID, or in some other capacity between 1995 and 1998. The leaders that were surveyed met at least one of these criteria. For this survey, the opinions of combat arms officers in infantry or armor branches and combat service support officers in quartermaster, ordnance, or transportation branches were

desired. Officers from these branches are likely to work in some capacity with the support operations lieutenant in the FSC. A purposive sample was taken from the population of officers serving on the staff, faculty or as a student of the Army Command and General Staff College (CGSC). A purposive sample is appropriate when the researcher is selecting a sample on the basis of his knowledge of the population, its elements, and the nature of the research (Babbie 1990, 97).

Survey Distribution

The 421 Officer Record Briefs (ORB) in the above-mentioned branches were screened and 28 of 242 combat arms (CA) and 17 of 179 combat service support (CSS) officers were selected as possibly having Force XXI experience. These officers were sent the survey. Thirteen officers (eight CA and five CSS) replied back that they had not worked with Force XXI and therefore were not qualified to take the survey. The 13 officers were taken out of the population reducing the population to 32 officers (20 CA and 12 CSS). As will be discussed in chapter 4, eighteen officers (56 percent) returned the surveys, ten CA (50 percent) and eight CSS (66 percent).

Survey Development

The survey was developed as the tool to obtain primary source information from SMEs. This information guided the design of the professional development plan. The survey provided both qualitative and quantitative data that could be analyzed to answer the primary question and the three subordinate questions of this study. Specific questions were formulated, which, when combined and analyzed allowed the concepts to be measured (Seymour, Sundman, and Bradburn 1983, 12). The three subordinate questions are sequential and build on each other, which guided the survey development.

Subquestion One

Which SKBs are most important for the FSC support operations officer to successfully perform his duties? This subordinate question was developed by analyzing the relationship between the FSC support operations officer's responsibilities identified in the training support plan (TSP) and the tactical logistics functions. The purpose of the survey was to prioritize the SKBs required by the FSC support operations officer to be successful. This prioritization influenced the design of the professional development plan to train the CSS lieutenant to become a FSC support operations officer. Many of the skills required are conceptual and require knowledge in the tactical logistics functions to influence the behaviors of the support operations officer. This overall understanding of the tactical logistics functions directly led to the next subquestion.

Subquestion Two

Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties? This subquestion was designed to guide the professional development plan to meet training requirements for developing the SKBs. The support operations officer's understanding of the tactical logistics functions allows him to perform anticipatory logistics and react decisively to situations (behaviors). This question prioritized the focus of the tactical logistic functions and influenced the professional development plan to address the SKBs. The importance of the tactical logistics functions influenced the means of training the CSS lieutenant in the understanding of these functions and the SKBs to be successful.

Subquestion Three

Which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC? The professional development plan will be a combination of the three pillars; however, one will serve as the primary means for training. The survey was also used to further define how each pillar should be used to train the SKBs. These questions in combination with questions under the other sub-questions provided a thorough source of data for analysis.

Survey Analysis

Once the data was collected, it was analyzed to determine a leader consensus of the primary and subquestions. The survey responses were analyzed using a descriptive classification that separated, categorized and summarized the data (Simon 1969, 333). This methodology provided a tool for objective measurements to prioritize training and the best methods to train. The interpretation of the data analyzed determined the design of the professional development plan to train CSS lieutenants to serve as support operations officers in the FSC. The analysis of the survey is provided in the next chapter.

CHAPTER 4

ANALYSIS

Introduction

The analysis of the primary data in this chapter directly influenced the conclusions, recommendations, and the FSC Support Operations Officer Professional Development Plan designed in this study. The survey of SMEs, that was designed as a result of the research method described in chapter 3, served as the tool to collect the primary data. The survey provided quantitative and qualitative data for the analysis. The analysis and interpretation of the primary data was combined with the expertise gained through secondary data to form opinions on designing the professional development plan. The survey used to solicit SMEs opinions (appendix A) was designed to support the research question and three subordinate questions of this thesis. The primary data collected was summarized and analyzed by the three sub-problems outlined in this study.

As described in chapter 3, a purposive sample population was identified for this study. This technique was important in that it provided first-hand expertise from different perspectives in answering the research question, subordinate questions, and designing the FSC Support Operations Officer Professional Development Plan. A combination of combat arms (CA) and combat service support (CSS) officers were identified as SMEs and asked to complete the survey. Forty-five faculty and students were given the survey based on an officer record brief (ORB) screening. Thirteen officers replied back that they had not worked with Force XXI and therefore were not qualified to take the survey. The thirteen officers were taken out of the population reducing the population to thirty-two officers (20 CA and 12 CSS). Eighteen officers (56

percent) returned the surveys, ten CA (50 percent) and eight CSS (66 percent). As the demographics indicate, the sample population provided a variety of perspectives.

Demographics

A conscious effort was made to obtain a diverse sample in rank, position (student or faculty), and track (CA or CSS). The demographics of the sample are shown in tables 1 to 6.

Table 1. Demographics of SMEs by Rank

	Frequency	Percent
MAJ	11	61.1
LTC	7	38.9
Total	18	100

Table 2. Demographics of SMEs by Position

	Frequency	Percent
Student	10	55.6
Faculty	8	44.4
Total	18	100

Table 3. Demographics of SMEs by Track

	Frequency	Percent
CA	10	55.6
CSS	8	44.4
Total	18	100

Table 4. Cross-tabulation Between Rank and Position

	Student	Faculty	Total
MAJ	10	1	11
LTC	0	7	7
Total	10	8	18

Table 5. Cross-tabulation Between Rank and Track

	CA	CSS	Total
MAJ	3	8	11
LTC	7	0	7
Total	10	8	18

Table 6. Cross-tabulation Between Position and Track

	CA	CSS	Total
Student	3	7	10
Faculty	7	1	8
Total	10	8	18

Analysis of the Demographics

The frequency and percentage of the three demographic charts (Tables 1, 2, and 3) are almost identical. Further analysis using cross-tabulation of the three areas (Table 4, 5 and 6) revealed that a strong correlation existed between faculty and lieutenant colonel as well as between student and major. There were ten students in the sample and all were majors. There were eight faculty members in the sample and seven were lieutenant colonels. This correlation was expected since a large majority of Command and General Staff Officer Course students are majors and instructors are typically lieutenant colonels. Additionally, all CSS officers in the sample were majors, resulting in

seven of the eight CSS majors being students (88 percent). The strong correlation between these demographic groups did not result in significant bias in the survey responses. The Friedman Test was performed on all survey questions in which SMEs prioritized variables. Only question nine (prioritizing operational methods to train lieutenants in the desired SKBs) was outside a .05 statistical significance measure. The other four were well under .05. This quote better illustrates how statistically sound the results of these survey questions are:

The statistical significance of a relationship observed in a set of sample data, then, is always expressed in terms of probabilities. Significant at the .05 level ($p < .05$) simply means that the probability of a relationship as strong as the one observed being attributable to sampling error alone is no more than 5 in 100. Put somewhat differently, if two variables are independent of one another in the population and if 100 probability samples are selected from that population, no more than 5 of those samples should provide a relationship as strong as the one observed. (Babbie 1990, 298)

This finding was important in that a general consensus was obtained, regardless of demographic groups, which determined what is important in relations to designing the FSC Support Operations Officer Professional Development Plan. The Friedman Test proved that these results could not occur by chance. The statistical significance for the responses to each survey question will be addressed within the analysis of each survey question.

Survey Analysis

The survey was analyzed starting with the research question followed by the three subordinate questions.

Research Question

Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC of the Force XXI division?

Survey Question

Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC of the Force XXI division? (circle answer or X next to answer)

- a. Yes: b. No:

Purpose of Survey Question

This question was the foundation on which this study was built. The research question addressed the perceived void that existed between identifying the support operations officer's responsibilities and training a CSS lieutenant to assume those responsibilities. Force XXI logistics requires a lieutenant serving as the FSC support operations officer to have SKBs traditionally associated with a major or senior captain serving as a forward support battalion (FSB) support operations officer. The research question surveyed the SMEs to determine if a specific professional development plan must be designed to train CSS lieutenants to serve as FSC support operations officers or not.

Table 7. SMEs Response to Research Question

	Frequency	Percent
Yes	16	88.9
No	2	11.1
Total	18	100

Analysis

An overwhelming 89 percent felt that a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC of the Force XXI division must be designed. The two SMEs that answered no were CA officers serving on the faculty with six months or less experience working with Force XXI. Both provided qualitative data that suggested that a lieutenant would not be able to follow a demanding professional development plan. One SME suggested that a branch-detailed CSS officer from the maneuver battalion should serve as the FSC support operations officer (a view commonly expressed by CA officer). The SME further suggested that a two or three-week institutional logistics class should be provided to the CSS branch-detailed officer to enhance the officers understanding of logistics. The other SME insisted that both FSC platoon leaders would be too busy to undertake a demanding professional development plan and that the FSC support operations officer would just learn on the job.

The other sixteen SMEs agreed that some type of additional training would be required for a CSS lieutenant in the FSB or a CSS lieutenant serving as a branch-detailed officer in the maneuver battalion to perform as the FSC support operations officer. Although many CA officers felt that a branch-detailed lieutenant would be the preferred

choice over a FSC platoon leader, there will be situations when that is not possible. The overwhelming majority of the SMEs felt that a specific professional development plan must be implemented if the FSC support operations officer will have a chance to meet the lofty requirements that Force XXI requires. This challenge requires a focused plan based on the three subordinate questions of this study.

Subquestion One

Which SKBs are most important for the FSC support operations officer to successfully perform his duties?

Survey Question

Prioritize which SKBs are most important for the FSC support operations officer to successfully perform his duties. (Number 1 to 7. 1 being the *most important*.)

- a. Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB.
- b. Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2).
- c. Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations.
- d. Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders/requests to perform anticipatory logistics management.
- e. Possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB.

- f. __ Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics.
- g. __ Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.

Purpose of Survey Question

This survey question was presented to provide direction for the FSC Support Operations Officer Professional Development Plan. The SKBs were based on analyzing the responsibilities of the support operations officer identified in the TSP. The importance of understanding the tactical logistics functions as the foundation to perform multifunctional logistics in an anticipatory manner influenced the development of the SKBs. The SKBs were worded in a manner that communicated a broad purpose affecting different aspects of the support operations officer's duties. The data summarized below was analyzed as it pertained to designing the professional development plan.

Table 8. Summary of Mean Rank Prioritization of SKBs--Lower is Better

	Overall	CA	CSS
SKB-A	5.17 (5)	5.2 (6)	5.13 (5)
SKB-B	5.94 (7)	6.2 (7)	5.63 (6)
SKB-C	3.83 (4)	4.1 (4)	3.5 (4)
SKB-D	3.28 (3)	3.5 (3)	3 (2.5)
SKB-E	1.72 (1)	1.5 (1)	2 (1)
SKB-F	2.83 (2)	2.7 (2)	3 (2.5)
SKB-G	5.22 (6)	4.8 (5)	5.75 (7)

Analysis

The data collected presented a very clear overall prioritization of the seven desired SKBs. The Friedman Test was used to prioritize these data. The statistical significance of this test was extremely good (.000) which means that the relationship between variables due to sampling error is less than 1/1,000. This result provided a high-confidence level in using the overall mean results as the priority of training within the desired SKBs. However, since the sample size was relatively small, the prioritization of the SKBs within the CA and CSS samples was used to show possible discrepancies. Using this data, the prioritization of the top four SKBs remained constant as compared to the bottom three SKBs. Considering the data available, as summarized in figure 11, the SKBs were subdivided into three categories of importance.

Priority I

SKB-E (Possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB) clearly stood out as the most important SKB according to the data shown in figure 11. This SKB is closely associated with conceptual and communication leadership skills as identified in the new FM 22-100, *Army Leadership*. Which allows leaders to integrate training these skills within other leader development programs that exist in the FSB.

Priority II

The next three SKBs (F, D, and C respectively) were grouped together in the second level of importance.

1. SKB-F: Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics.

2. SKB-D: Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders/requests to perform anticipatory logistics management.

3. SKB-C: Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations.

Table 8 shows that these three SKBs were consistently aligned whether viewed by the overall mean, CA mean, or CSS mean. Additionally, the overall means of these SKBs are relatively close in number (F-2.83, D-3.28, and C-3.83). The data in table 8 displayed a logical separation between these three SKBs, the most important SKB and the three least important SKBs.

These three SKBs are closely associated with technical and tactical leadership skills as identified in the new FM 22-100, *Army Leadership*. To perform anticipatory logistics requires the FSC support operations officer to possess a thorough understanding of the relationship between maneuver and logistics on the battlefield. These three SKBs are related to many collective and leader tasks within the FSC training support plan (TSP). The training requirement for this type of understanding can be overwhelming, which dictates that SKB assessments take place and training is tailored to individual lieutenants.

Priority III

The next three SKBs (A, G, and B respectively) can be grouped together in the third level of importance.

4. SKB-A: Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB.

5. SKB-G: Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.

6. SKB-B: Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2).

The overall means of these SKBs are relatively close in number (A-5.17, G-5.22, and B-5.94). Table 8 shows that these three SKBs are inconsistent in ranking between the three categories (overall, CA, and CSS) however they remain as the three least important in all three categories. Additionally, When viewing the data in table 8, a logical separation exists between these three SKBs, and all the others.

SKBs A and B are closely associated with technical leadership skills as identified in the new FM 22-100, *Army Leadership*. In many respects, subordinates within the FSC will possess a large portion of these SKBs since specific soldiers will operate this equipment on a daily basis. SKB-G requires a well-developed understanding of all four leadership skills (technical, tactical, conceptual, and communication), particularly conceptual. Since this may be hard to develop in a short period of time and there are several levels of key leaders between the FSC mission and logistics at the division level the cost benefits may never be realized.

Summary

The prioritization of the desired SKBs showed an extremely high level of statistical significance (less than .001). There was no evidence of bias based on rank, position (student or faculty), or track (CA or CSS). The FSC Support Operations Officer Professional Development Plan was based on the prioritization displayed below.

Priority I

- 1. SKB--Possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB.**

Priority II

- 2. SKB--Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics.**
- 3. SKB--Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders/requests to perform anticipatory logistics management.**
- 4. SKB--Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations.**

Priority III

- 5. SKB--Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB.**
- 6. SKB--Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.**
- 7. SKB--Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2).**

The training requirement to develop these SKBs can be overwhelming. The FSC Support Operations Officer Development Plan requires leaders to tailor the overall plan to meet the most essential requirements of each lieutenant who will serve as the FSC support operations officer. The accelerated time requirements to develop an officer with SKBs normally associated with a much more experienced CSS officer will not allow for a

standardized approach that is not personalized to an individual lieutenant's needs. This approach must also consider other factors dictated by the organization, and situation.

Subquestion Two

Which tactical logistics functions should the professional development plan focus on to develop the SKBs that will best assist the FSC support operations officer to successfully perform his duties?

Survey Question

Prioritize which tactical logistics functions the professional development plan should focus on to develop the SKBs that will best assist the support operations officer to successfully perform his duties (Number 1 to 6. 1 being the *most important*.). If there is more than one task within a tactical logistics function, circle or X the most important task within that function. For example, which, if any, would you consider most important for Arm? Ammo distribution system / ATP Operations / SAAS Knowledge. If ATP operations were your choice, you would circle or X that response.

- Man: Replacement movement
- Arm: Ammo distribution system / ATP operations / SAAS knowledgeable
- Fuel: Fuel distribution system / Fuel consumption estimates / Fuel distribution equipment capabilities
- Fix: Maintenance control operations / Conduct tactical field maintenance / Combat repair team functions / Recovery operations
- Move: Move supplies and personnel / Understand distribution management / Understand & operate Movement Tracking System (MTS)

Sustain: General supply distribution system (LOGPAC/tailgate) / Food service operations / Water operations & distribution / Laundry & Bath / Field sanitation services / Mortuary affairs operations

Purpose of Survey Question

The purpose of this survey question was to guide the focus of the professional development plan by emphasizing the tactical logistics functions that were most important for the FSC support operations officer to understand. The overall understanding of multifunctional logistics is based on the logistician's knowledge of the tactical logistical functions. By prioritizing the focus of understanding these functions, the professional development plan can insure that the essential tactical logistics functions are emphasized while training of the SKBs. This question also solicited the SMEs opinion on tasks within the tactical logistics functions, in order to guide the training of each tactical logistics function. The data summarized in table 9 were analyzed as it pertained to designing the professional development plan.

**Table 9. Summary of Mean Rank Prioritization of
Tactical Logistics Functions--Lower is Better**

	Overall	CA	CSS
Man	5.83 (6)	5.7 (6)	6 (6)
Arm	2.53 (2)	2.3 (1)	2.75 (3)
Fuel	2.33 (1)	2.7 (3)	1.88 (1)
Fix	2.64 (3)	2.6 (2)	2.63 (2)
Move	3.94 (5)	4.2 (5)	3.65 (4)
Sustain	3.72 (4)	3.3 (4)	4.13 (5)

Analysis

The data collected presented an overall prioritization of the six tactical logistics functions. The Friedman Test proved the statistical significance of this test was extremely good (.000), which means that the relationship between variables due to sampling error is less than 1/1,000. This result provided a high confidence level in using the overall mean results as the priority of training within the tactical logistics functions. However, the sample size was relatively small and the overall mean numbers were closer grouped than in the SKB prioritization. When comparing the overall mean numbers with those of the CA and CSS samples, differences in priorities were evident. The top three tactical logistics functions (fuel, arm, and fix) clearly stood out from the bottom three (sustain, move, and man); however the sequence of the top three were different in the overall sample, the CA sample and the CSS sample. Similarly, of the bottom three tactical logistics functions only the last one (man) was consistent when comparing the overall sample with the two sub-set samples. For this reason, considering the data available, as summarized in table 9, the tactical logistics functions were subdivided into two categories of importance.

Priority I

Table 9 displays that both CA and CSS officers consider the three tactical logistics functions below the most important. However, the order of importance was not consistent. Nevertheless, this data provided focus in that the CSS lieutenant's development of the SKBs should focus on these three tactical logistics functions. Furthermore within these three tactical logistics functions, SMEs were asked to choose

the most important task. The results are annotated by the percent of the overall sample that chose the task within each tactical logistics function.

1. Fuel: 40% Fuel distribution system 47% Fuel consumption estimates/
13% Fuel distribution equipment capabilities

2. Arm: 71% Ammo distribution system/ 29% ATP operations/ 0% SAAS
knowledgeable

3. Fix: 27% Maintenance control operations/ 53% Conduct tactical field
maintenance/ 20% Combat repair team functions/ 0% Recovery operations

The circled tasks only represent a percent of a small sample population that felt these tasks were the most important of the ones listed. In order to meet the intent of developing a lieutenant in the desired SKBs, a more thorough understanding of these tactical logistics functions would be required than just the task that scored the highest in this survey. The professional development plan can not be limited to these specific areas.

Priority II

Table 9 displays that both CA and CSS officers consider the tactical logistics functions of sustain, move, and man to require less emphasis than the top three. SMEs were asked to choose the most important task within these three tactical logistics functions. The results are annotated by the percent of the overall sample that chose the task within each tactical logistics function.

4. Sustain: 82% General supply distribution system (LOGPAC/tailgate)/
6% Food service operations/ 12% Water operations & distribution/ 0% Laundry & Bath
/0% Field sanitation services/ 0% Mortuary affairs operations

5. Move: 50% Move supplies and personnel/44% Understand distribution management/6% Understand & operate Movement Tracking System (MTS)

6. Man: Replacement movement

The circled tasks only represent a percentage of a small sample population that felt these tasks were the most important of the ones listed. This survey suggests that these three tactical logistics functions should not be considered a primary focus for developing a lieutenant to serve as the FSC support operations officer. Although a more thorough understanding of these tactical logistics functions would be required to fully understand and perform anticipatory multifunctional logistics, time may not permit this level of expertise. In the case of sustainment, LOGPAC and tailgate operations are essential for the maneuver battalion to survive and requires more attention than many tasks in the top three tactical logistics functions (fuel, arm, fix). The data collected within this part of the survey provided guidance for the development of the professional development plan.

Summary

The prioritization of the tactical logistics functions showed an extremely high level of statistical significance (less than .001). There was no evidence of bias based on rank, position (student or faculty), or track (CA or CSS). The FSC Support Operations Officer Professional Development Plan was designed considering an understanding of the top three tactical logistics functions (fuel, arm, and fix) as essential based on the survey. Within each tactical logistics function there are specific tasks that are essential for the FSC support operations officer to know. Understanding how LOGPAC and tailgate

operations work within the tactical logistics function of sustainment could easily be one of the top three requirements for the FSC support operations officer.

The training requirement to develop the desired SKBs as they pertain to these tactical logistics functions require key leaders to personalize the implementation of the FSC Support Operations Officer Development Plan to meet the most essential requirements of each lieutenant who will serve as the FSC support operations officer. The accelerated time requirements to develop an officer with SKBs traditionally associated with a much more experienced CSS officer will require a more thorough understanding of the tactical logistics functions than time may permit. A standardized approach that is not personalized to an individual lieutenant's needs, the current situation, and the organizational climate will only exacerbate the situation.

Subquestion Three

Which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC?

Survey Question

If a professional development plan is designed, which of the three Army leader development pillars (institutional, operational, or self-development) should be used as the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC? (circle answer or X next to answer)

- a. Institutional
- b. Operational
- c. Self-Development

Purpose of Survey Question

The professional development plan will be a combination of the three pillars. However, one pillar will serve as the primary means for training. This question identified the SMEs' opinions on who should be the primary leader that is responsible for developing CSS lieutenants in the desired SKBs required to serve as the FSC support operations officer; the school commandant, the FSB commander, or the individual CSS lieutenant. Additional questions were used to further define how each pillar should be used to train the SKBs.

Questions 8-10 provided the SMEs opinions on the most appropriate means in which to use the individual pillars to train CSS lieutenants to serve as the FSC support operations officer. There are many methods within each pillar that can be used to train the lieutenants; however, these survey questions only focused on a few approaches for each pillar. These questions will only provide a preliminary focus for the professional development plan. The data for subquestion three (survey question 7) and survey questions 8-10 are summarized and analyzed below.

Table 10. Summary of Primary Development Pillar—Higher is Better

	Frequency	Percent
Institutional	5	28
Operational	12	67
Self-development	1	5
Total	18	100

Analysis

Two-thirds of the SMEs felt that the operational setting was most appropriate to serve as the primary means to train the CSS lieutenant to become the FSC support operations officer. Ninety-percent of the CA officers felt this way while only 38 percent of the CSS officers felt this way. Three of the four CSS officers who suggested that the institutional pillar be used as the primary means to train CSS lieutenants came from CASCOM and may have been biased by their role with Force XXI initiatives from that perspective.

The FSB commander, in the operational setting, should serve as the primary leader to control and monitor the majority of the FSC Support Operations Officer Professional Development Plan. However, institutional leaders and organizations will be critical in the overall design of the plan. There will also be institutional course development initiatives that are directly and indirectly involved with preparing the CSS lieutenant to serve in the Force XXI logistical environment. Institutional organizations must design the foundation of the plan. However, it will ultimately be the FSB commander and other key operational leaders associated with the future FSC support operations officers that must build upon that institutional foundation in order for the CSS lieutenant to develop the desired SKBs. The condensed timeline (two to three years) to develop the desired SKBs will require taking the overall plan and tailoring it to the individual lieutenant. This tailoring can only be done in the operational setting by the leaders who know the lieutenant's strengths and weaknesses. The operational leader's ability to integrate different training methods is critical to the plan's success.

Survey Question

Regardless of your answer to the last question, prioritize the different approaches that can be used for the institutional training portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 3. 1 being the *most important*.)

- a. Train multifunctional logistics at OBC.
- b. Phase in training for select CSS lieutenants using OBC, and the current Support Operations Course (addresses multifunctional logistics from corps level to Brigade level) taught at the Army Logistics Management College (ALMC), Fort Lee, Virginia.
- c. Design a specific course for FSC support operations officers.

Table 11. Summary of Mean Rank Prioritization of Institutional Approaches to training SKBs-Lower is Better

	Overall	CA	CSS
Approach A	2.17 (2)	2 (2)	2.38 (3)
Approach B	2.39 (3)	2.6 (3)	2.13 (2)
Approach C	1.44 (1)	1.4 (1)	1.5 (1)

Analysis

Although the institutional leader will have more responsibilities than just developing and administering the institutional classroom portion of the development of the CSS lieutenant, this question only addressed the classroom responsibility. The Friedman Test was used to prioritize these data. This question tested at .012 level of significance, which means that the relationship between variables due to sampling error is 12 out of 1,000. This rating provided a high confidence level in using the overall mean

results as the priority of training within the institutional environment. However, since the sample size was relatively small, the prioritization of the training methods within the CA and CSS samples was used to show possible discrepancies. Using these data the prioritization of approach C remains constant when compared to the three sample populations.

Although approach C (design a specific course for FSC support operations officers) is a viable option in the end-state, it is not feasible in the interim. Currently, there are only two FSC support operations officers in the Army. A specific course for FSC support operations officers is not feasible until the Army has changed a much larger portion of the active duty divisions to this design. Approach B (Phase in training for select CSS lieutenants using the officer basic course and the current Support Operations Course) is more feasible in the interim. By using the current Support Operations Course the CSS lieutenant receives a focused view of multifunctional logistics at the brigade and higher level. This approach supports the prioritization of the SKBs. The CSS lieutenant can be sent to additional institutional supply, maintenance, and transportation courses to strengthen individual weaknesses as required. By using approach B, as Force XXI conversions slowly take place through the Army, data on course requirements can be collected to insure a quality course is designed for future use.

Survey Question

Regardless of your answer to question 6, prioritize the different approaches that can be used for the operational training portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 3. 1 being the *most important*.)

- a. Assign as the S&T platoon leader and as the Maintenance platoon leader while serving in the FSC.
- b. Assign as a platoon leader in the FSC and then as in the FSB support operations officer.
- c. The FSB designs a specific professional development program, training FSC platoon leaders to become support operations officers.

Table 12. (Summary of Mean Rank Prioritization of Operational Approaches to training SKBs--Lower is Better)

	Overall	CA	CSS
Approach A	1.89 (2)	2 (2)	1.75 (1)
Approach B	1.72 (1)	1.6 (1)	1.88 (2)
Approach C	2.39 (3)	24 (3)	2.38 (3)

Analysis

This question was the only one that resulted in a level of significance less than .05. The operational training responsibilities are far more encompassing than the three approaches listed in the survey. The operational pillar of training is a combination of assigned duty positions, additional responsibilities, collective training and leader development training. The survey question was not worded well enough to portray all aspects of the operational pillar and explains the inconclusive data obtained from this question. The Friedman Test produced a .115 level of significance. The level of significance for the survey question is above the generally accepted level of significance (.05). The significance at the .115 level produced a low confidence level in using the

results as the foundation to build the operational pillar of the FSC Support Operations Officer Professional Development Plan.

The inconsistency within the CA and CSS responses confirmed the inconclusive results of the data. As identified earlier in the survey, 67 percent of the SMEs responded that the operational pillar should be the primary means to train CSS lieutenants in the desired SKBs. The operational setting provides the most flexibility to train individual lieutenants and meet organizational needs. The survey question was not only limited in scope but also did not account for the flexibility needed to address situational demands and individual requirements. The ability to adjust the plan to meet individual and organizational needs is critical to train a lieutenant in the desired SKBs to be effective within the FSC.

Survey Question

Regardless of your answer to question 6, prioritize the different approaches that can be used for the self-development portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 2. 1 being the *most important*.)

- a. __ Develop a correspondence course to train CSS lieutenants in multifunctional logistics and prepare the lieutenant for the FSC support operations officer position.
- b. __ Commanders' provide guidance on professional reading and the lieutenant educates himself.

Table 13. Summary of Mean Rank Prioritization of Self-Development Approaches to training SKBs--Lower is Better

	Overall	CA	CSS
Approach A	1.18 (1)	1.22 (1)	1.13 (1)
Approach B	1.82 (2)	1.78 (2)	1.88 (2)

Analysis

The self-development pillar of the professional development plan will be a critical part of developing the SKBs in the lieutenant required to serve as FSC support operations officer. The survey results demonstrated some insight on how to best use this training tool. The Friedman Test was used to prioritize the data pertaining to the two options. This question tested at .008 level of significance, which means that the relationship between variables due to sampling error is 8 out of 1,000. This result provided a high confidence level in using the overall mean results as the priority of administering training within the self-development area. However, since the sample size was relatively small, the prioritization of the training methods within the CA and CSS samples was used to show possible discrepancies. Using these data, the prioritization of developing some type of correspondence course remained constant when compared to the three sample populations.

Although developing some type of correspondence course is a viable option, the use of professional reading and other self-development programs must also be used. Interactive CDs and the Internet can be valuable tools that have provided great advancements in self-study programs. The positive response to developing some type of correspondence course implies that institutional leaders must assist in organizing a

diverse method of training the self-development pillar. Additionally, the operational leader must assist the CSS lieutenant by providing guidance and structure to self-development initiatives.

Summary

The data provided guidance on how to design the training method of the FSC Support Operations Officer Professional Development Plan. A two-thirds majority felt that of the three pillars (institutional, operational, and self-development) the professional development plan should be designed primarily around the operational pillar. The majority of the data showed an extremely high level of statistical significance for the different training methods within each pillar. However, this data was not all encompassing for possible methods of training, nor did the data consider organizations' or individual lieutenant's situations.

Summary of Survey Analysis

The analysis from a purposive sample population of 18 SMEs (ten CA and eight CSS) was used as a primary tool to guide the development of the FSC Support Operations Officer Professional Development Plan (appendix B). Eighty-nine percent of the sample population agreed that a specific professional development plan to train CSS lieutenants to serve as the FSC support operations officer was needed. The answers to the three subordinate questions provided the guide for designing the professional development plan.

The prioritization of the SKBs was obtained using the survey results that were arranged into three categories. Priority I consisted of one SKB (possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver

battalion and FSB) that clearly scored better than the rest. Priority II consisted of three SKBs that ranked closely to each other and were consistent within CA and CSS subgroups. The last category (priority III) consisted of three SKBs that were more technical in nature and generally were performed by other personnel. These categories coupled with the tactical logistics functions provided a focus used to design the professional development plan.

The second subordinate question of this study used the tactical logistics functions as a guide to further focus the professional development plan. The survey results clearly showed that three tactical logistics functions (fuel, arm, and fix) should be the focus of the lieutenant's training. The remaining three tactical logistics functions (sustain, move, and man) may not require as much training time or should be trained as a second priority. With that said, the survey also suggested that there are specific tasks (i.e. LOGPAC/tailgate operations) in the lower priority group of the tactical logistics functions that are more important than many specific tasks in the higher priority group of tactical logistics functions. These finding demonstrated the importance of tailoring the implementation of the plan to insure that individual lieutenant's needs as well as organization's needs are met within all sets of circumstances. To meet this challenge requires integrating training requirements with training methods.

The last part of the survey provided guidance on how to train the lieutenant using the Army leader development system as a model. All three pillars (institutional, operational, and self-development) must be integrated into one professional development plan to train the CSS lieutenant in the desired SKBs. Two-thirds of the SMEs felt that the operational pillar must serve as the primary means of training. This methodology

supports the rationale of tailoring the training to the individual lieutenant's needs. The institutional pillar must provide the institutional and self-development programs that can be used by the operational commander to tailor professional development of the CSS lieutenant to meet individual and organizational needs.

The training requirement to develop the desired SKBs requires key leaders to refine the FSC Support Operations Officer Development Plan to meet the most essential requirements of each lieutenant who will serve as the FSC support operations officer.

The compressed time requirement to develop an officer with SKBs traditionally associated with a much more experienced CSS officer will require the use of all three leader development pillars. A standardized approach that is not personalized to an individual lieutenant's needs and the organizational climate will not be successful. By having various training methods available within each pillar, a tailored approach for training is available to the operational leader depending on the situation. The results of this survey coupled with the knowledge gained from secondary sources was used to make conclusions and recommendations as well as the FSC Support Operations Officer Professional Development Plan in appendix B.

CHAPTER 5

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Discussion

This study filled the void that existed between the support operations officer's responsibilities (as identified in CASCOM's FSC Training Support Plan) and training a CSS lieutenant to assume those responsibilities. From the results of this study, conclusions and recommendations on training CSS lieutenants in the desired SKBs to be successful as the FSC support operations officer were made. The results of this study were the foundation of the professional development plan in appendix B.

This study identified the relationship between training the FSC support operations officer and using the Army's leader development system to accomplish this training. The results of this study were combined with the eight-stage process of change format from Kotter's *Leading Change* book to form a draft FSC Support Operations Officer Professional Development Plan. Institutional and operational CSS leaders must now provide initial input to revise the FSC Support Operations Officer Professional Development Plan. A guiding coalition (stage 2 of Kotter's process) for both the institutional and operational organizations should provide the initial and follow-up input to the plan. The operational guiding coalition leads the implementation of the development plan for CSS lieutenants by tailoring it to the individual lieutenant's and the organization's needs. Feedback is provided through the institutional guiding coalition who is responsible for developing and updating the plan. This process is continuous and ensures short-term and long-term goals are met. Figure 4, in appendix B, depicts this process.

The primary input from this thesis into the professional development plan was a result of combining secondary and primary data. This secondary data were used to form a basis of knowledge on Force XXI logistics, the FSC concept, the support operations officer's responsibilities, and the format of the professional development plan.

Secondary data were used to develop a survey that answered the primary problem statement and the three subordinate problem statements.

Primary data were obtained using a survey. A purposive sample population was identified for this study. This technique was important in that it provided first hand expertise from different perspectives in answering the research question, subordinate questions, and designing the FSC Support Operations Officer Professional Development Plan. Twenty combat arms (CA) and twelve combat service support (CSS) officers served as the total populations of SMEs at CGSC. Fifty-six percent of the population returned the survey. The survey questions were designed to answer the research question and three subordinate questions. This method identified which SKBs leaders consider the most important for the support operations officer and which leader development pillar should be used as the primary means to train CSS lieutenants in these SKBs.

Conclusions, recommendations, and the FSC Support Operations Officer Professional Development Plan were influenced by the combination of the survey results and knowledge gained through secondary sources.

Conclusions

The results from the survey, as analyzed in chapter 4, coupled with secondary data, provided guidance on what and how to train the CSS lieutenant to prepare him to serve as the FSC support operations officer. Eighty-nine percent of the SMEs confirmed

that a specific professional development plan was needed to train CSS officers to serve as the FSC support operations officer. The results of the entire survey were general in that they apply to CSS lieutenants regardless of branch or whether they served as platoon leaders in the FSC or branch-detailed to a combat arms battalion (CAB). Key operational leaders must eventually tailor this general approach to the individual lieutenant. A standardized approach that is not personalized to an individual lieutenant's needs and the organizational climate can not meet the intent of this plan in the short amount of time available. The findings within the three subordinate questions provided the guidance needed to prioritize and personalize the training to the lieutenant based on the situation.

The results of the first subordinate question successfully separated the seven SKBs into three categories of importance. Priority I and II SKBs (4 of the 7 SKBs) can serve as the guide by which the operational leader should manage the training for a lieutenant. These four SKBs require the FSC support operations officer to be able to use all four leadership skills (technical, tactical, conceptual, and communication) as identified in the new FM 22-100, *Army Leadership*. This provides the opportunity for the FSB commander to capture training for the CSS lieutenants within his leader development program. The last three SKBs are considered priority three training and should be trained as opportunities arise in the operational setting. Training opportunities for all seven SKBs lend themselves to integration within the course of daily operations and especially CAB training events.

CAB training events provide an excellent opportunity to integrate tactical logistics functions with the SKBs. The lieutenant's exposure to priority I tactical logistics functions (fuel, arm, and fix) in the field environment will reinforce the concepts he was

exposed too in institutional and self-development settings. This means the maintenance platoon leader must spend time with the S&T platoon during exercises and vice versa. Although the priority II tactical logistics functions (sustain, move, and man) are not as important as priority I functions, some specific tasks within sustain and move are vital (i.e. LOGPAC/tailgate operations) and should be specifically addressed by operational leaders. The lieutenant's training in the tactical logistics functions should be captured within the contents of developing the SKBs. Choosing the method and approach to training individual lieutenants based on the individual situation produces efficient and effective results.

The success of the FSC Support Operations Officer Professional Development Plan requires an aggressive approach in which the institution leads the development of the plan and the operational leader implements the training. Two-thirds of the SMEs thought the operational pillar should serve as the primary means to train CSS lieutenants in the desired SKBs. The operational leader can provide the flexible and tailored approach required to successfully train the CSS lieutenant. This approach is what makes the implementation of the FSC Support Operations Officer Professional Development Plan in appendix B a challenge. The following recommendations can assist the CSS community in instituting these changes and future changes related to this study.

Recommendations

1. CASCOM take the FSC Support Operations Officer Professional Development Plan in appendix B and build an institutional guiding coalition to lead the refinement effort with 4th Infantry Division.

2. The 4th FSB create an operational guiding coalition to provide initial input to the plan through CASCOM and later provide lessons learned from the implementation of the plan.

3. The 4th FSB implement the FSC Support Operations Officer Professional Development Plan in appendix B as part of a battalion professional development program as the FSC Support Operations Officer Professional Development Plan is being refined.

Recommendations for Further Studies

1. Based on the results of this study, further refine the FSC Support Operations Officer Professional Development Plan based on input from the institutional and operational guiding coalitions.

2. Determine if branch-detailed CSS officers should be assigned to CABs with the intent of becoming the FSC support operations officer that supports that CAB after platoon leader time.

3. Integrate the professional development plan from this study with possible career progression options for CSS officers within the FSC concept (i.e. branch-detailed lieutenants become FSC support operations officers then a FSC commander).

APPENDIX A

SURVEY

CGSC CONTROL # 8998

Developing the Forward Support Company (FSC) Support Operations Officer

This survey is designed as an important part of a MMAS student's thesis. The student's thesis (To determine whether the Army needs to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the Forward Support Company (FSC) of the Force XXI division?) is designed around the questions below. If you received this survey, your ORB indicated that you may have had first-hand experience with Force XXI division redesign between 1995 and 1998. Please take a few minutes and fill out the survey by either hard copy or on the computer. When you have completed the survey, you may drop it in MAJ Ed Zimmerman's distribution box in Classroom 16, 2d floor, Bell Hall or return it by email to ezimmerman@lvnworth.com. Thank you for answering the survey.

Name:

Rank:

Branch:

Position: Student or Staff/Faculty

Phone # / RM #:

4. Prioritize which skills, knowledge and behaviors (SKBs) are most important for the FSC support operations officer to successfully perform his duties. (Number 1 to 7. 1 being the *most important*.)

- ___ Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB.
- ___ Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2).
- ___ Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations.
- ___ Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders/requests to perform anticipatory logistics management.
- ___ Possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB.
- ___ Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics.
- ___ Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.

5. Prioritize which tactical logistics functions the professional development plan should focus on to develop the SKBs that will best assist the support operations officer to successfully perform his duties (Number 1 to 6. 1 being the *most important*). If there is more than one task within a tactical logistics function, circle or X the most important task within that function. For example, which, if any, would you consider most important for Arm? ___ Ammo distribution system / ___ ATP Operations / ___ SAAS Knowledge. If ATP operations were your choice, you would circle or X that response.

- ___ Man: Replacement movement
- ___ Arm: ___ Ammo distribution system / ___ ATP operations / ___ SAAS knowledgeable
- ___ Fuel: ___ Fuel distribution system / ___ Fuel consumption estimates / ___ Fuel distribution equipment capabilities
- ___ Fix: ___ Maintenance control operations / ___ Conduct tactical field maintenance / Combat repair team functions / ___ Recovery operations

Move: Move supplies and personnel / Understand distribution management /
Understand & operate Movement Tracking System (MTS)

Sustain: General supply distribution system (LOGPAC/tailgate) / Food service operations / Water operations & distribution / Laundry & Bath / Field sanitation services / Mortuary affairs operations

6. Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the Forward Support Company (FSC) of the Force XXI division? (circle answer or X next to answer)

a. Yes:

b. No:

7. If a professional development plan is designed, all three Army leader development pillars (institutional, operational, or self-development) will be used. Which of the three pillars should be the primary means to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC? (circle answer or X next to answer)

a. Institutional

b. Operational

c. Self-Development

8. Regardless of your answer to the last question, prioritize the different approaches that can be used for the institutional training portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 3. 1 being the *most important*.)

Train multifunctional logistics at OBC.

Phase in training for select CSS lieutenants using OBC, and the current Support Operations Course (addresses multifunctional logistics from corps level to Brigade level) taught at the Army Logistics Management College (ALMC), FT Lee, Virginia.

Design a specific course for FSC support operations officers.

9. Regardless of your answer to question 6, prioritize the different approaches that can be used for the operational training portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 3. 1 being the *most important*.)

Assign as the S&T platoon leader and as the Maintenance platoon leader while serving in the FSC.

Assign as a platoon leader in the FSC and then as in the FSB support operations officer.

The FSB designs a specific professional development program, training FSC platoon leaders to become support operations officers.

10. Regardless of your answer to question 6, prioritize the different approaches that can be used for the self-development portion of the professional development plan designed to train CSS lieutenants in the desired SKBs before they serve as the support operations officers in the FSC. (Number 1 to 2. 1 being the *most important*.)

 Develop a correspondence course to train CSS lieutenants in multifunctional logistics and prepare the lieutenant for the FSC support operations officer position.

 Commanders' provide guidance on professional reading and the lieutenant educates himself.

11. Feel free to add your comments below on the SKBs and the design of the professional development plan.

APPENDIX B

FSC SUPPORT OPERATIONS OFFICER PROFESSIONAL DEVELOPMENT PLAN

Introduction

Force XXI division redesign requires a CSS lieutenant to serve as the forward support company (FSC) support operations officer. As such, he is responsible for coordinating and synchronizing the logistics support for a combat arms battalion (CAB). The FSC support operations officer has responsibilities that are above and beyond those of the support platoon leader in today's Army of Excellence (AOE) division. This professional development plan was as a direct result of a Master of Military Art and Science (MMAS) thesis, "Designing a Professional Development Plan for the Support Operations Officer of the Forward Support Company," conducted at the Command and General Staff College, Fort Leavenworth, Kansas. The study determined that a specific professional development plan was required to train CSS lieutenants who are capable of serving as a FSC support operations officer. This plan is outlined using an eight-stage process of change developed by John Kotter, a Professor of Leadership at Harvard Business School. The purpose of the plan is to train CSS lieutenants with the desired skills, knowledge, and behaviors (SKBs) to serve as the FSC support operations officer. The professional development plan incorporates the Army leader development system (institutional training and education, operational assignments, and self-development) as the method of training. This plan is designed to help institutional and operational leaders train the FSC support operations officer.

Background of the Professional Development Plan

As the U.S Army moves into the twenty-first century, technology will be used more than ever to enhance combat operations. Force XXI redesign uses technological enablers to enhance proficiency and situation awareness on the battlefield. These enhancements are needed to overcome reductions in equipment and personnel. Combat Service Support (CSS) on the battlefield must change in order to support faster moving operations and overcome limited resources. In Force XXI, technology is used to provide precision logistics in order to maximize the use of limited resources. To accomplish the logistical goals of the Force XXI division, the Forward Support Company (FSC) replaces the support platoon of the maneuver battalion in the Army of Excellence (AOE). The FSC support operations officer's ability to operate in a multifunctional logistics environment will be essential for the maneuver battalion to succeed on the battlefield.

The research for the MMAS thesis analyzed the FSC support operations officer responsibilities. Based on these responsibilities, the research question (Does the Army need to design a specific professional development plan to train CSS lieutenants to serve as support operations officers in the FSC?) served as the basis of this study. The research examined what SKBs are most important for a CSS lieutenant to succeed as the FSC support operations officer. Once the SKBs were identified and prioritized, a professional development plan was designed to assist institutional and operational CSS leaders in training the CSS lieutenants in these SKBs.

The research examined literature on Force XXI logistics and the FSC's responsibilities. The support challenges for the FSC and specifically the support operations officer guided the development of desired SKBs. A survey of subject matter

experts prioritized the importance of the SKBs and assisted in formulating the professional development plan that addressed the three pillars of the Army leader development model (institutional, operational, and self-development).

This study concluded that a comprehensive professional development plan was required to develop CSS lieutenant in the desired SKBs in order for the lieutenant to be successful as the FSC support operations officer. This document represents the proposed professional development plan using Kotter's eight-stage process of change as the format.

The Design of the Professional Development Plan

The MMAS thesis findings and Kotter's eight-stage process of change were combined to make this draft FSC Support Operations Officer Professional Development Plan. The MMAS study provided statistically significant information on which SKBs are important and how the Army's leader development system can be used to train those SKBs. Kotter's eight-stage process of change, from *Leading Change*, provided a format to address expected resistance and obstacles to a change initiative like this one. Now institutional and operational CSS leaders must provide initial input to revise the FSC Support Operations Officer Professional Development Plan. A guiding coalition (stage 2 of Kotter's process) for both the institutional and operational organizations should provide the initial and follow-up input to the plan. The operational guiding coalition leads the implementation of the development plan to CSS lieutenants by tailoring it to the individual lieutenant's and the organization's needs. Feedback is provided through the institutional guiding coalition who is responsible for developing and updating the plan. This continuous process is depicted in figure 4.

Designing the FSC Support Operations Officer Professional Development Plan

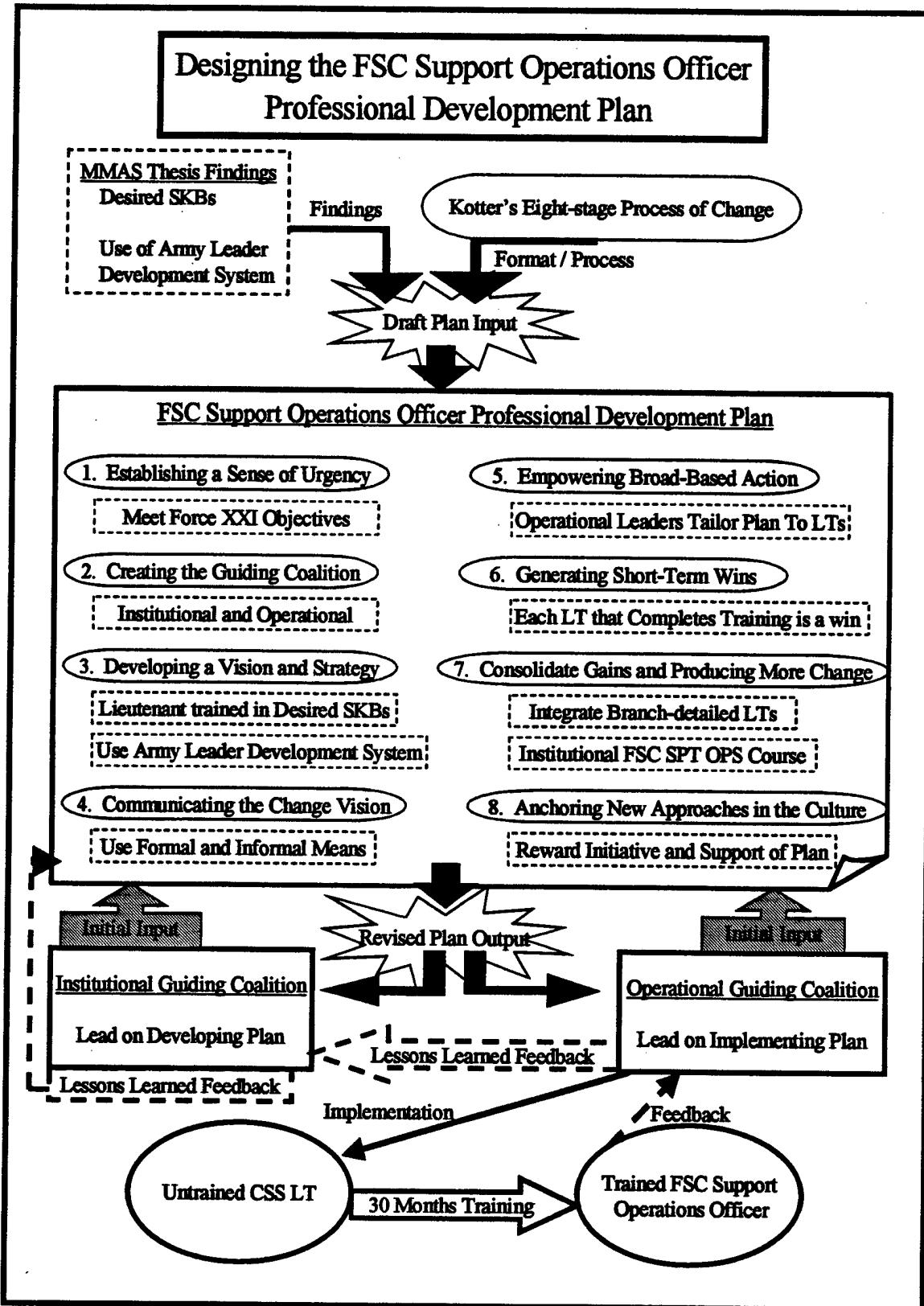


Figure 4.

Kotter's eight-stage process of creating change provided a format for the FSC Support Operations Officer Professional Development Plan to effectively communicate the findings of this study in relations to the research question and three subordinate questions. More importantly, using Kotter's process as the format for this plan provided a tool to systematically address anticipated resistance and obstacles to this change in training CSS lieutenants. Implementing change in an organization requires an enormous effort in leadership to alter the organization's behavior (Kotter 1996, 20).

Needed change can still stall because of inwardly focused cultures, paralyzing bureaucracy, parochial politics, a low level of trust, lack of teamwork, arrogant attitudes, a lack of leadership in middle management, and the general human fear of the unknown. To be effective, a method designed to alter strategies, reengineer processes, or improve quality must address these barriers and address them well. (Kotter, 1996, 20)

The eight-stage process below represents a concept of the FSC Support Operations Officer Professional Development Plan that must be refined by institutional and operational leaders together. Once refined, the plan can guide institutional and operational leaders to overcome resistance and obstacles that can be expected as a result of implementing this plan to train the FSC support operations officer.

Establishing a Sense of Urgency

Purpose

A sense of urgency provides the focus and momentum to carry out a major change initiative. Without this sense of urgency enlisting key people with the power and credibility to design, communicate and implement such a change is difficult (Kotter 1996, 36).

Relevance to the Plan

The purpose of the FSC Support Operations Officer Professional Development Plan is to guide the training of the FSC support operations officer. To train a lieutenant in the desired SKBs in three years that historically has been done in 6-8 years requires a sense of urgency. This sense of urgency is apparent when considering that the FSC support operations officer's performance directly impacts the mission success for the FSC and for the supported CAB. The importance of the FSC support operations officer's performance and the Army's approach to developing that officer is evident when looking at the concept of support for Force XXI, the FSC support operations officer's responsibilities, and the results of this study.

This sense of urgency must be communicated to institutional leaders who are primarily responsible for developing the FSC Support Operations Officer Professional Development Plan and to operational leaders who must implement this plan. For the FSC concept to succeed, the training of the FSC support operations officer must be accomplished in the near term, while the 4th Infantry Division is testing the Force XXI division redesign. If the CSS community cannot succeed in producing a trained FSC support operations officer, the FSC concept as currently designed may be at risk. This sense of urgency will lead to recruiting key leaders to guide the development and implementation of the professional development plan.

Creating the Guiding Coalition

Purpose

A strong team of leaders and managers who can work together for a common purpose must be assembled. This coalition must be able to develop and communicate the

vision and strategy of the change initiative. “A strong guiding coalition is always needed—one with the right composition, level of trust, and shared objectives. Building such a team is always an essential part of the early stages of any effort to restructure, reengineer, or retool a set of strategies” (Kotter 1996, 52). The guiding coalition must have key senior leaders involved or it will not have the power to persuade change.

Relevance to the Plan

The FSC Support Operations Officer Professional Development Plan must have a guiding coalition within both the institutional and operational setting. These two teams of individuals must work together to refine this draft FSC Support Operations Officer Professional Development Plan. Senior CSS leaders in TRADOC, CASCOM, ALMC, and subordinate organizations must believe and support this change initiative in order for the plan to work. Subject matter experts (SMEs) in training development, leader development, and the FSC concept of support must work together to refine the professional development plan ensuring that operational input is assimilated in the plan. This plan must be flexible enough for the operational leader to tailor to the individual lieutenant and organizational requirements.

The operational leaders must also build a guiding coalition. This coalition starts with the FSB commander. He must communicate the importance of this training program for his lieutenants and solicit the support of the maneuver brigade commander and the CAB commanders who have CSS branch-detailed officers that could serve as FSC support operations officers. This support is essential if a branch-detailed officer is going to be effective as the FSC support operations officer. Platoon leaders in the FSC are also

viable candidates to serve as the FSC support operations officer, so the FSB commander must have the FSC commanders committed to this training plan.

In the early stages of refining this plan key leaders in the operational setting (4th ID) must work with the institutional leaders to develop the vision and strategy. As a result of the MMAS study, a draft vision and strategy for the FSC Support Operations Officer Professional Development Plan is available.

Developing a Vision and Strategy

Purpose

The vision provides the direction, motivation, and helps to coordinate individual actions quickly for a change initiative (Kotter 1996, 68 and 69). An effective vision statement is required to break through the resistance that can be expected from individual complacency or fear (Kotter 1996, 69). The strategy proposes how to achieve the vision.

Relevance to Plan

Like any successful change, the FSC Support Operations Officer Professional Development Plan must have a vision. The vision must apply to institutional leaders, operational leaders and the individual CSS lieutenant who serves in the FSB or branch-detailed to the CAB. All actions by institutional or operational guiding coalitions should support the vision statement. The following vision statement can serve as a starting point for the guiding coalitions from the institution and operational elements who should come together to refine the FSC Support Operations Officer Professional Development Plan

Vision Statement: Design and implement a professional development plan that produces trained CSS lieutenants in the skills, knowledge, and behaviors (SKBs) required to successfully serve as the FSC support operations officer after 30 months of Army service.

The strategy for the FSC Support Operations Officer Professional Development

Plan identifies how to accomplish the vision statement. The institutional strategy for developing the professional development plan and the operational strategy to implement the plan must be synchronized. The two guiding coalitions must work together as one in this stage. Based on the results of the MMAS study the following strategy can serve as a start point for the institutional and operational guiding coalitions.

The following strategy is based on secondary and primary data obtained from the MMAS thesis. The study identifies and prioritizes the desired SKBs required of the FSC support operations officer and how to best use the Army leader development system (institutional training and education, operational assignments, and self-development) to train the lieutenant in the desired SKBs.

The professional development plan requires training to occur in the institutional, operational, and self-development settings. The development of the desired SKBs in an accelerated time period requires the three-pillar leader development system to be managed intensely and the training be tailored to an individual lieutenant. The institutional leader is better resourced to provide this framework, identifying different training approaches for the SKBs. The operational leader serves as the monitor of the training program and tailors the training and the approach used based on the individual lieutenant and the current organizational situation. Lastly, the plan identifies possible self-development methods that the lieutenant can use to develop the desired SKBs. Within this plan, all three pillars of the Army leader development system are identified and the operational leader can use the method that is best for that situation. The final plan must provide a thorough identification of what needs to be trained and how to

perform that training within the flexible environment needed to produce a competent FSC support operations officer in 30 months of service to the Army.

The study affiliated with this plan used a survey of subject matter experts (SMEs) to prioritize SKBs (developed by the researcher who analyzed the FSC Training Support Plan and considered the tactical logistics functions). The seven SKBs were broad in nature and represented common attributes and skills normally associated with coordinating and synchronizing logistics missions. The prioritization of the desired SKBs showed an extremely strong level of statistical significance (less than .001). There was no evidence of bias based on rank, position (student or faculty), or track (CA or CSS). Using this data, the prioritization of the top four SKBs remained constant as compared to the bottom three SKBs. Considering the data available, the SKBs were subdivided into three categories of importance.

Priority I

1. SKB--Possess the skills to coordinate and synchronize logistics support with key personnel in the maneuver battalion and FSB.

Priority II

2. SKB--Understand the tactical logistics functions at brigade level to enhance the support operations officer's ability to perform anticipatory logistics.

3. SKB--Analyze LOG SITREPs and identify specified plus implied tasks from maneuver and FSB orders/requests to perform anticipatory logistics management.

4. SKB--Understand the unique and general aspects of the different distribution systems and what impact they have on each other in relations to synchronization of LOGPAC/Tailgate operations.

Priority III

5. SKB--Understand the automation integration in order to maintain situation awareness and disseminate pertinent digital information to FSC elements and the FSB.
6. SKB--Understand the tactical logistics functions at division level to enhance the support operations officer's ability to perform anticipatory logistics.
7. SKB--Possess the technical proficiency to operate the automation systems for CSS awareness (CSSCS/FBCB2).

The institution guiding coalition should now take these SKBs and identify different training events that can be used to enhance these SKBs. Institutional, operational, and self-development training activities can be identified to support one or several SKBs. The institution guiding coalition provides several alternatives in the three different pillars that the operational leader has available to train his lieutenants. The operational leader should consider the different methods of training and the individual lieutenant's strengths and weaknesses when determining what to train and how to train it. The goal should be that the lieutenant is highly competent in priority I and II SKBs.

According to the survey results of the MMAS study, the tactical logistics functions of fuel, arm, and fix should be the primary focus within training the SKBs identified. The prioritization of the tactical logistics functions showed an extremely strong level of statistical significance (less than .001). There was no evidence of bias based on rank, position (student or faculty), or track (CA or CSS). When comparing the overall mean numbers with those of the CA and CSS samples, differences in priorities were minor. The comparison resulted in the top three tactical logistics functions (fuel, arm, and fix) clearly standing out from the bottom three (sustain, move, and man).

Institutional and more importantly operational leaders should consider using the tactical logistics functions of fuel, arm, and fix within training events to enhance SKBs. The remaining three tactical logistics functions (sustain, move, and man) may not require as much training time or should be trained as a second priority. With that said, the survey also suggested that there are specific tasks (i.e. LOGPAC/ tailgate operations) in the lower priority group of the tactical logistics functions that are more important than many specific tasks in the higher priority group of tactical logistics functions. These finding demonstrate the importance of tailoring the implementation of the plan to insure that individual lieutenant's needs as well as organization's needs is met.

Using Kotter's eight-step process to guide the FSC Support Operations Professional Development Plan ensures the strategy supports the vision statement. The integration of the desired SKBs with a training plan that uses a proven and familiar training system such as the Army leader development system insures an easy means to accomplish the objectives. The development and implementation of the vision and strategy of the FSC Support Operations Officer Professional Development Plan must now be communicated to everyone involved in developing and implementing the plan.

Communicating the Change Vision

Purpose

Communicating the vision insures that the organization understands the purpose of this change. The vision statement itself must be simple yet meaningful enough to communicate the intent of the change. Once the vision statement meets this intent, then leaders must use all possible means to communicate this vision to personnel within the organization. This communication includes leading by example with actions that

support the vision and confronting problem areas that do not support the vision (Kotter 1996, 90).

Relevance to the Plan

The FSC Support Operations Officer Professional Development Plan will be demanding on all people directly involved in the training of the CSS lieutenant, plus many people who will be indirectly affected. For the plan to work, it is important that it is a shared effort between the institutional organizations, the operational organizations and the individual lieutenant being trained. If any of these three elements are not supportive of the plan, it will fail. Effective communication of the vision is needed to generate the support and the motivation required by all individuals involved and helps defeat the resistance to the change.

The institutional leader should provide formal communication of this plan in manuals, on the Internet, and during training settings such as the pre-command course, CLOAC, and OBC. Similarly, the operational leader should communicate this vision formally through such means as his command philosophy, the quarterly and annual training guidance, and quarterly training briefs. Additionally, both institutional and operational leaders should use other, less formal, means of communicating the vision. Quarterly counseling sessions, informal discussions with subordinates, and leader development programs provide great opportunities to generate two way conversations about the FSC Support Operations Professional Development Plan and possible training shortfalls that may need to be confronted. The two-way discussion also provides the opportunity for individuals to become part of the solution and not a source of resistance.

Empowering Broad-Based Action

Purpose

Empowering individuals to take initiatives that support the change allows problems, unforeseen by senior leaders, to be solved early in the process. Empowering subordinates and encouraging them to take risks in solving the problems that inevitably arise, provides the sense of teamwork for pushing a major change initiative through obstacles. Another common shortfall when trying to empower subordinates is inadequate training on the new initiative, which means individuals who could make useful suggestions are unaware of the purpose of the change.

Relevance to the Plan

Empowering broad-based action is essential in developing and implementing the FSC Support Operations Officer Professional Development Plan. For subordinate leaders to provide the input needed to make this professional development plan a success, they must be educated on the intent of the plan. A train the trainer concept that allows leaders to see beyond the physical training requirements and leads to conceptual aspects of developing and implementing the plan is required. For this plan to succeed there is a training requirement for the developers and trainers similar to that of the CSS lieutenants for whom the plan is designed. Leaders are expected to develop and implement a training program that they may not agree with because the program is different than what they have seen over time or considered too similar to the Military Qualification Skills (MQS) program that was largely considered unsuccessful. To overcome this resistance the same principles for developing or changing the CSS lieutenant's SKBs must be used for the leaders involved in the FSC Support Operations Officer Professional Development Plan.

This quote from Kotter portrays the importance of changing SKBs (Kotter calls them behaviors, skills, and attitudes) for both the teacher and the student in this situation.

First we often don't think through carefully enough what new behaviors, skills, and attitudes will be needed when major changes are initiated. As a result, we don't recognize the kind and amount of training that will be required to help people learn those new behaviors, skills, and attitudes. Second we sometimes do recognize correctly what is needed but when we translate that into time and money, we are overwhelmed by the results. (Kotter 1996, 108)

To prevent this plan from being too overwhelming and not considered beneficial, the advantages must be demonstrated. There must be organizational benefits and in many cases benefits for individuals who may resist the change otherwise.

Generating Short-Term Wins

Purpose

The high cost in money and time associated with a major change initiative makes it an easy target for resisters and cynics of the change (Kotter, 1996, 123). Since major changes normally take a long period of time to fully be implemented, short-term wins provide a measurement of success to keep the change initiative alive. If success can not be seen in the short-term the change initiative is at risk to survive.

Relevance to the Plan

The FSC Support Operations Officer Professional Development Plan requires an enormous amount of work and resources within the institutional and operational organizations. If short-term success can not be accomplished and measured, the professional development plan will see the same demise as the MQS program. The primary way to measure success will be the quality of CSS lieutenant that serves as the FSC support operations officer. However, there will be many lieutenants who go through

the training that will not become the FSC support operations officer. Since each lieutenant that goes through the training will have a better understanding of multifunctional logistics than they had prior to the training, each lieutenant who successfully completes the training plan is a short-term success. This accomplishment as well as the efforts of the leaders who helped this lieutenant succeed should be recognized in a fashion that demonstrates to others the importance of this training program. Leaders must be careful; short-term success can bring on complacency that appeared to be defeated in the first step of this process (develop a sense of urgency).

Consolidating Change and Producing More Change

Purpose

The guiding coalition and most importantly the senior leadership must not let short-term success lead to resistance to produce more change required to meet long-term goals. The short-term success provided the credibility and momentum needed to make more changes based on the lessons learned to this point. Now is the time to link other system and structure changes to enhance the overall change initiative (Kotter 1996, 143).

Relevance to the Plan

Short-term success within the FSC Support Operations Officer Professional Development Plan allows additional changes in training to take place. For instance, although the plan is designed for CSS officers in the FSB and branch-detailed to the CAB, it will be a challenge to keep the second group of lieutenants in the training program. The gain of credibility with the short-term wins provides an opportunity not only to enhance participation of the branch-detailed lieutenant but see if the system would be better served by establishing a career progression link between branch-detailed

lieutenants and the FSC support operations officer position. Since many of the same training problems the FSC support operations officer faces have also been identified with the FSC commander position, a similar linkage could be made where the FSC support operations officer is eventually assigned as a FSC commander.

Results of the MMAS survey of SMEs also suggested that a specific institutional course for FSC support operations officers should be established. This change would be appropriate for this stage of the process. A Support Operations Course at the Army Logistical Management College already exists. Although this course is designed for FSBs, MSBs, and CSBs, it provides relevant information that the FSC support operations officer can use. As the number of FSCs increase Army wide and more is known about the FSC support operations officer's responsibilities and the success of FSC Support Operations Officer Professional Development Plan, a specific institutional course may or may not be required.

This stage of the process is particularly difficult for individuals who feel that short-term success is good enough. For this reason, personnel changes within certain positions may be required to take the FSC Support Operations Officer Professional Development Plan to the next stage.

Anchoring New Approaches in the Culture

Purpose

The organization's culture must see the benefits of the change initiative in the long-term to maintain an atmosphere that welcomes change for the better. Individuals who supported the change initiative should be rewarded appropriately and those who resisted the change should be removed. If this does not take place, the organization will

not be able to maintain a climate that promotes initiative and risk taking for advancement of the organization (Kotter 1996, 157).

Relevance to the Plan

The success of the FSC Support Operations Officer Professional Development Plan, like many current initiatives related to Force XXI, is unknown at this time. However, regardless of the long-term success, this initiative provides an opportunity for the organization and leaders at all levels to grow professionally. The way short-term and long term-successes and failures are handled will determine what risks, if any, leaders are willing to take in this plan and future initiatives.

Conclusions

This draft FSC Support Operations Officer Professional Development Plan provides a foundation that must be refined and built upon in order to train CSS lieutenants in the desired SKBs to be successful as the FSC support operations officer. The research for the MMAS thesis, which developed and prioritized the SKBs plus analyzed the use of the Army leader development system, provides a sound start point for the institutional and operational guiding coalitions. Kotter's eight-stage process for creating change serves as an excellent tool to successfully guide the overall FSC Support Operations Officer Professional Development Plan. Once this draft professional development plan is refined, it must be followed to insure success. Kotter says that sometimes people will skip stages due to pressure to produce and it inevitably fails. He goes on to say that after step one, the urgency phase, several stages may operate simultaneously but they must be initiated in order (Kotter 1996, 24).

Success on the Force XXI logistics battlefield lies with senior combat service support (CSS) leaders able to develop junior officers to perform logistics functions previously performed at the field grade level. Force XXI logistics redesign envisions a lieutenant serving as the forward support company (FSC) support operations officer with the skills, knowledge, and behaviors (SKBs) traditionally associated with a major or senior captain serving in a forward support battalion (FSB) as a support operations officer. As identified in DA PAM 350-58, *Leader Development for America's Army*, leaders develop and enhance their SKBs using the Army leader development system that consist of three pillars: institutional training and education, operational assignments, and self-development. This plan combined the findings of the MMAS study and Kotter's eight-stage process, producing a draft FSC Support Operations Officer Professional Development Plan, to train CSS lieutenants to serve as FSC support operations officers.

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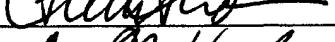
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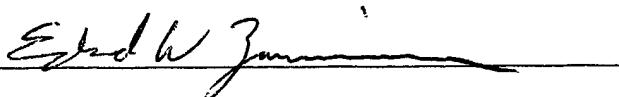
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